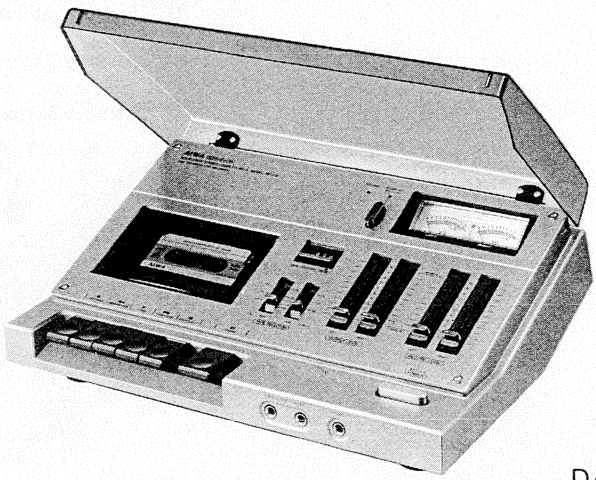
STEREO CASSETTE DECK WITH DOLBY SYSTEM

MODEL AD-1250 EE,UK

AIWA®

[SERVICE MANUAL]

ISO
Set using ISO screws



DATE OF ISSUE 25/10/1976

SPECIFICATIONS

Type	Stereo cassette tape deck with built-in Dolby NR System
Track format	4 tracks 2 channels
Circuitry	2 ICs, 28 transistors, 13 diodes, 3 LEDs
Power supply	**AD-1250EE** AC 110~120V/220~240V, Switchable 50/60Hz **AD-1250UK** AC 120V/240V, switchable 50/60Hz
Power consumption	10 W
Frequency Response	According to DIN 45 500 Blatt 8 LH tape: 30~12,500 Hz CrO_2 tape: 30~16,000 Hz Fe-Cr tape: 30~16,000 Hz LH tape: 30~14,000 Hz CrO_2 tape: 30~16,000 Hz Fe-Cr tape: 30~16,000 Hz
SN Ratio	According to DIN 45 500 Blatt 8 58 dB (Fe-Cr tape DOLBY NR ON) 60 dB (Fe-Cr tape DOLBY NR ON)
Wow & Flutter	According to DIN 45 500 Blatt 8 0.18% 0.18% 0.09% (WRMS)
Tape speed	4.8 cm/sec. (1-7/8 ips)
Rewind time	85 sec. (C-60)
Fast forward time	85 sec. (C-60)

Recording system	AC bias (frequency 85 kHz)
Erase system	AC erase
Motor	DC servo motor
Head	Ultra-hard quality permalloy head
Inputs	MIC max. sensitivity 0.3 mV (200 ohms ~10 kiloohms usable) LINE IN max. sensitivity 50 mV (more than 50 kiloohms) DIN max. sensitivity 0.1mV/kiloohms (3 kiloohms)
Outputs	LINE OUT standard level 0.775 V (0 VU) Optimum load impedance more than 50 kiloohms DIN standard level 0.775 V (0 VU) Headphones 8 ohms
Dimensions	388 (W) x 145 (H) x 275 (D) mm (with dust cover)
Weight	4.65 kg (with dust cover)
Accessories	DIN cord 1, Head cleaning stick 1, Cassette tape 1

- Specifications and external appearance are subject to change without notice due to product improvement.
- Dolby Noise Reduction System is licensed from Dolby Laboratories Incorporated.
- The name "Dolby" and the "Double D" symbol are trademarks of Dolby Laboratories Incorporated.

DISASSEMBLY INSTRUCTIONS

1. To Remove Top Panel

1) Remove 4 screws. (Refer to Fig. 1)

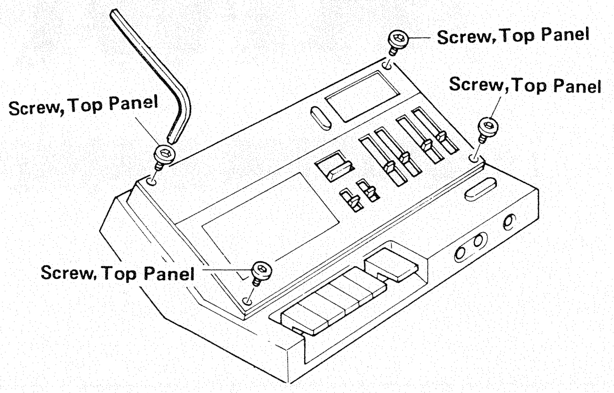

Screw,Top Panel
Screw,Top Panel
Screw,Top Panel
Screw,Top Panel

Fig. 1

2. To Remove Back Cover

1) Remove 6 screws. (Refer to Fig. 2)

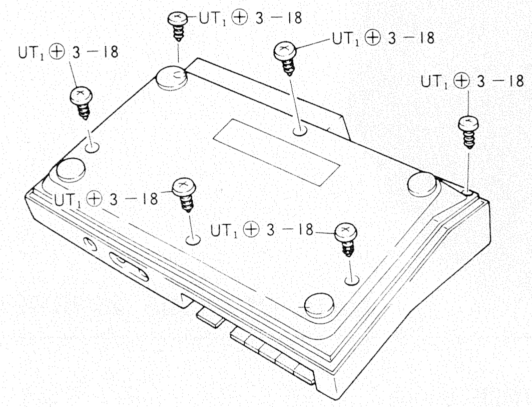

UT$_1$ ⊕ 3 − 18
UT$_1$ ⊕ 3 − 18
UT$_1$ ⊕ 3 − 18
UT$_1$ ⊕ 3 − 18
UT$_1$ ⊕ 3 − 18
UT$_1$ ⊕ 3 − 18

Fig. 2

3. To Remove Mechanism Chassis

1) Pull out the control knobs.
2) Remove 4 screws. (Refer to Fig. 3)

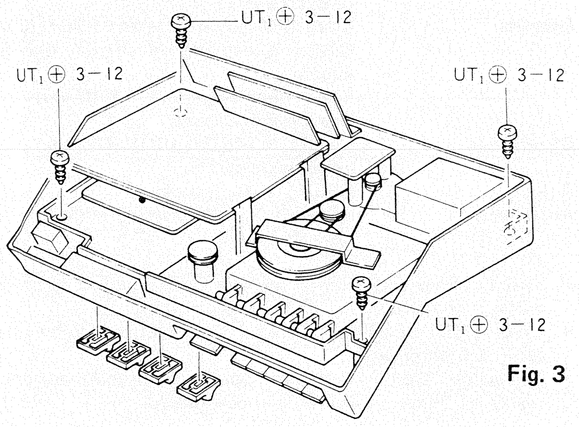

UT$_1$ ⊕ 3 − 12
UT$_1$ ⊕ 3 − 12
UT$_1$ ⊕ 3 − 12
UT$_1$ ⊕ 3 − 12

Fig. 3

4. To Remove Volume Circuit Baord

1) Remove 8 screws. (Refer to Fig. 4)

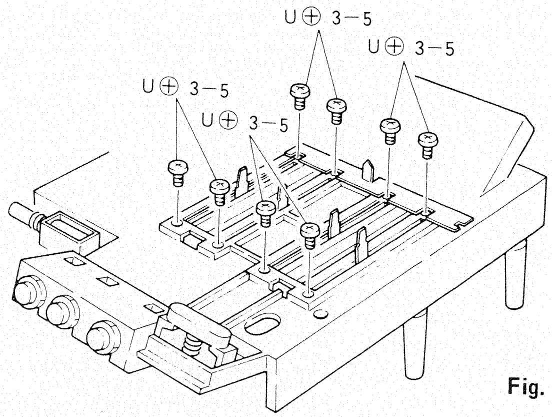

U ⊕ 3 − 5
U ⊕ 3 − 5
U ⊕ 3 − 5
U ⊕ 3 − 5

Fig. 4

5. To Remove REC/PB Circuit Board

1) Remove mounting screw. (Refer to Fig. 5)

2) Remove 2 springs. (Refer to Fig. 6)

3) Remove 3 screws. (Refer to Fig. 6)

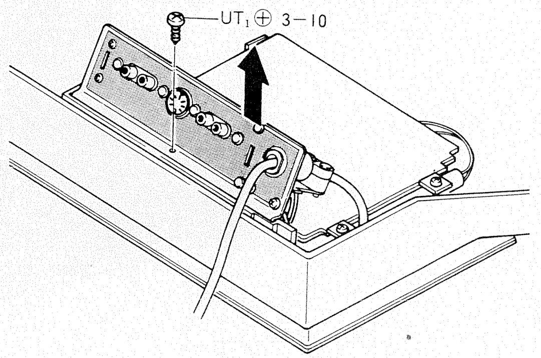


Fig. 5

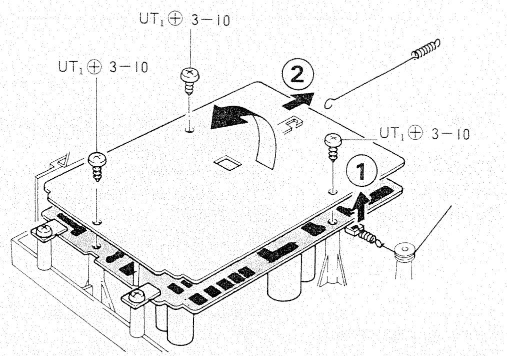

UT$_1$ ⊕ 3 − 10
UT$_1$ ⊕ 3 − 10
②
UT$_1$ ⊕ 3 − 10
①

Fig. 6

6. To Remove Peak Indicator Circuit Board

1) Remove 2 screws. (Refer to Fig. 7)

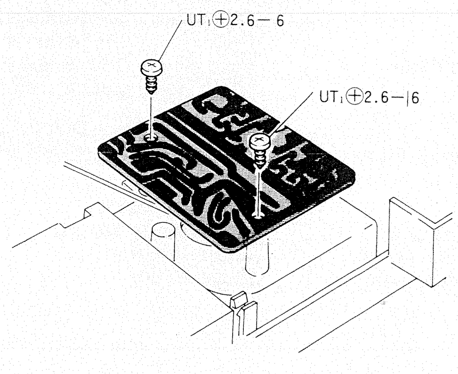

UT$_1$⊕2.6 − 6
UT$_1$⊕2.6 − 16

Fig. 7

7. To Remove Mechanism

1) Remove spring and 2 stuts. (Refer to Fig. 8)

2) Remove counter belt and 2 springs. (Refer to Fig. 9)

3) Remove main belt and spring. (Refer to Fig. 10)

4) Remove 4 screws. (Refer to Fig. 10)

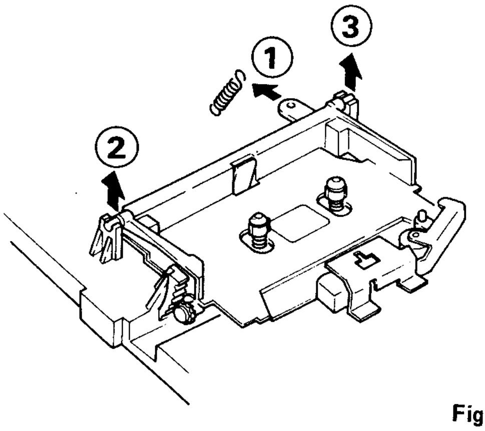


Fig. 8

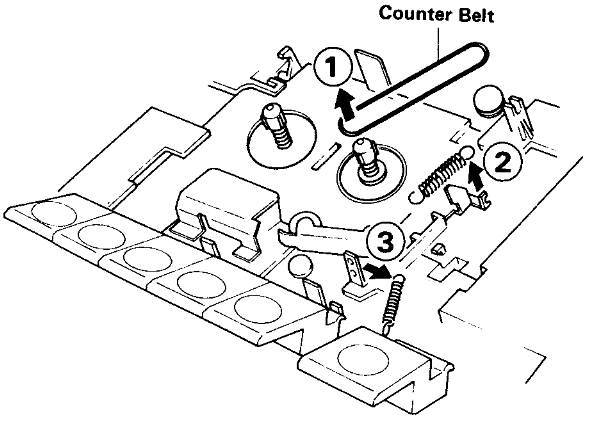


Fig. 9

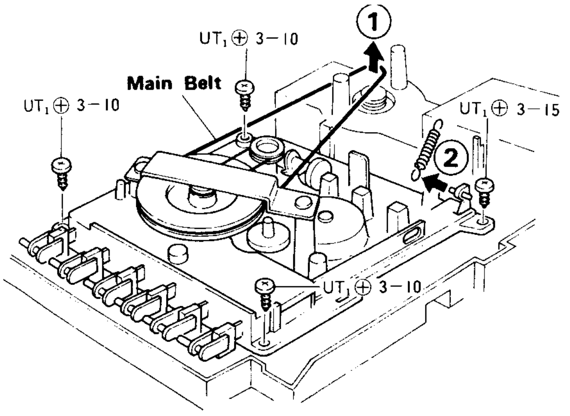


Fig. 10

ADJUSTMENTS

■ Mechanical Section

1. Thrust

Turn thrust adjusting screw in direction shown by arrow. Adjust for 0.2 ± 0.1 mm spacing between screw and flywheel. (Refer to Fig.11)

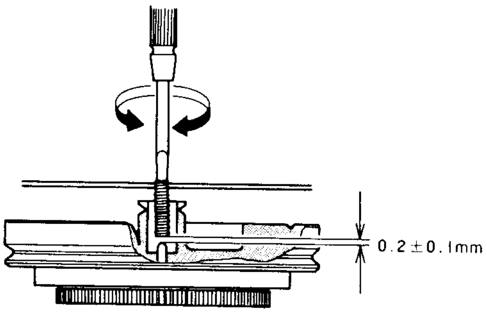


Fig. 11

2. Pause Spring

1) Confirm that pause spring lightly contacts the slider when slider tip is contacted at left side of worm wheel.
2) If space occurs between pause spring and slider due to strong pause spring contact with the slider, bend the pause spring so that the slider becomes lightly contacted. (Refer to Fig. 12).

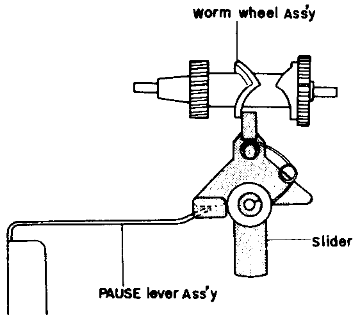


Fig. 12

3. Tape Speed

3kHz ± 1%
Use a standard test tape, TTA-111 (3 kHz) or equivalent.

4. Wow and Flutter

Less than 0.09% WRMS at PB
Use a standard test tape, TTA-111 (3 kHz) or equivalent.

5. Pinch Roller Pressure

275 ± 25g

6. Take-up Torque

50 ± 10g-cm

7. FF Torque

$100 \pm {}^{15}_{10}$ g − cm

8. Rewind Torque

$95 \pm {}^{15}_{5}$ g − cm

9. Automatic shut-off Time

Less than 15 sec.

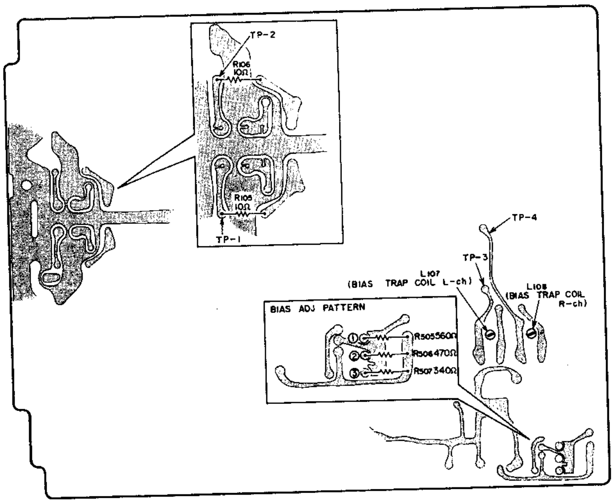
10. Current Consumption

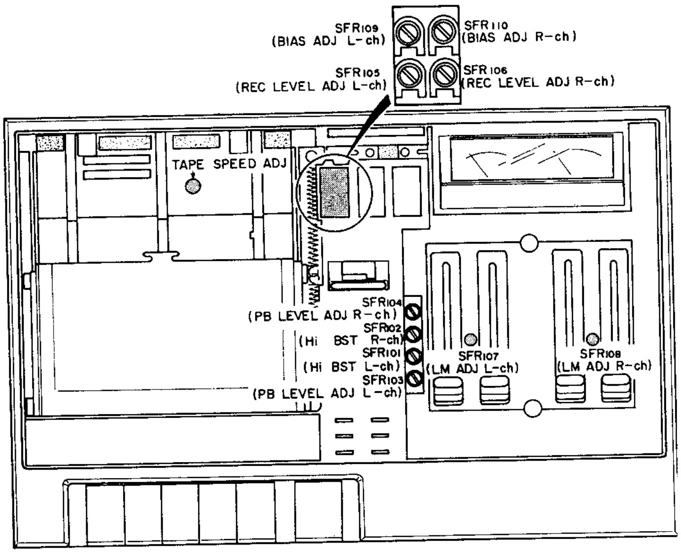
PLAY: Less than 110mA
REW: Less than 160mA
FF: Less than 160mA
(Mechanism unit only)

ADJUSTMENTS

Electrical Adjustments

- **Location of Main Parts**


TP-2
R106
10Ω
R105
10Ω
TP-1
TP-4
TP-3
L107
(BIAS TRAP COIL L-ch)
L108
(BIAS TRAP COIL R-ch)
BIAS ADJ PATTERN
①
②
③
R505 560Ω
R506 470Ω
R507 340Ω


SFR109
(BIAS ADJ L-ch)
SFR110
(BIAS ADJ R-ch)
SFR105
(REC LEVEL ADJ L-ch)
SFR106
(REC LEVEL ADJ R-ch)
TAPE SPEED ADJ
SFR104
(PB LEVEL ADJ R-ch)
SFR102
(Hi BST R-ch)
SFR101
(Hi BST L-ch)
SFR103
(PB LEVEL ADJ L-ch)
SFR107
(LM ADJ L-ch)
SFR108
(LM ADJ R-ch)

PLAYBACK ADJUSTMENTS

- **Conditions:**
  DOLBY-NR.....OFF OUTPUT LEVEL.....MAX OUTPUT.....LINE OUT

Adjustment Item	Tape Selector	Test Tape	Adjustment Location	Specification
Azimuth	CrO_2	TTA-117E	Rec./Pb. head azimuth screw	10 kHz portion output maximum for both L & R channels
Tape Speed	LH	TTA-111A	Speed semi-fixed resistor in motor	3 kHz ± 1%
Playback Level	LH	TTA-161	L-ch: SFR103 R-ch: SFR104	1.1 ± 0.15V
Playback Frequency Response	CrO_2	TTA-117E	L-ch: SFR101 R-ch: SFR102	1 kHz/10 kHz flat
Confirmation of Playback Frequency Response	LH	TTA-117E	————	With reference to 1 kHz: 100 Hz~10 kHz ± 2 dB 40 Hz $^{+2}_{-5}$ dB 12.5 kHz $^{+2}_{-3}$ dB

RECORDING ADJUSTMENTS

- **Conditions:**
  DOLBY-NR.....OFF OUTPUT LEVEL.....MAX TAPE SELECTOR.....CrO_2

Adjustment Item	Test Point	Adjustment Location	Specification
Bias Trap Coil	L-ch TP-3	L107	Adjust for minimum voltage at test point
	R-ch TP-4	L108	
Bias Current	L-ch TP-1	SFR109	5.5mV (550μA) at test point
	R-ch TP-2	SFR110	

- **Conditions:**
  DOLBY NR.....OFF, OUTPUT LEVEL.....MAX, INPUT.....LINE IN OUTPUT.....LINE OUT

Adjustment Item	Adjustment Location	Specification
Level Meter	L-ch SFR107 R-ch SFR108	With 400 Hz signal applied and at 1.1V output, the set VU meters shall indicate the Dolby mark.

■ REC/PB FREQUENCY RESPONSE ADJUSTMENT

Bias Current Adjustment

- **Conditions:**
  Input signed 1 kHz 10 kHz OVU −20 dB DOLBY-NR.....OFF OUTPUT LEVEL.....MAX
  OUTPUT.....LINE OUT

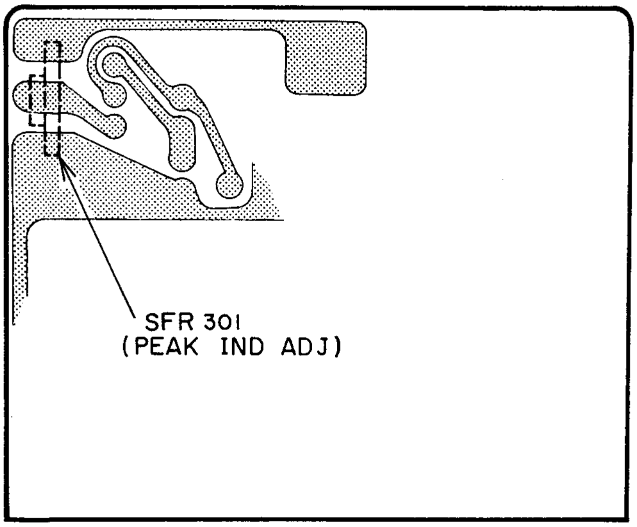
Tape Selector	Test Tape	Adjustment Location	5 kHz Level High	5 kHz Level Low	Specification
FeCr	TTA-119E	L-ch SFR301 R-ch SFR-302	Increase bias current beyond 550 μA (5.5mV)	Reduce bias current below 550 μA (5.5mV)	1 kHz/10 kHz 0 + 0.5 dB
BIAS.....Fe-Cr EQ.....LH	CS-10	Connect pattern to one point among ① ~ ③	Connect ③ pattern	Connect ① pattern	1 kHz/10 kHz 0 ± 1 dB

■ REC/PB SENSITIVITY ADJUSTMENT

- **Conditions:**
  Input signal 1 kHz OVU-20 dB DOLBY-NR.....OFF OUTPUT LEVEL.....MAX OUTPUT.....LINE OUT

Tape Selector	Test Tape	Adjustment Location	Specification
CrO_2	CS-20	L-ch: SFR105 R-ch: SFR106	77.5mV $^{+0.5}_{-0}$ dB
Fe–Cr	TTA-119E	————————	77.5mV ± 0.5 dB
BIAS.........Fe–Cr EQ............LH	CS-10	————————	77.5mV ± 0.5 dB

■ PEAK INDICATOR INDICATION ADJUSTMENT



- **Conditions:**
  DOLBY-NR.....OFF OUTPUT LEVEL.....MAX
  INPUT.....LINE IN

Adjustment Location	Specification
SFR301	With 400 Hz signal applied, LED shall light when VU meter indicates 5 ± 0.5 dB

■ ELECTRICAL MEASUREMENTS

1. Playback Out put

Test Tape	Specification	Remarks
TTA-161	1.1V ± 0.15V	Set VU meters shall indicate Dolby marks

2. Rec./Pb. Frequency Response

Input signal: 100Hz – 1 kHz – 10 kHz OVU – 20 dB

Frequency	Test Tape CS-20 Tape Selector CrO_2	Test Tape TTA-119E Tape Selector Fe-Cr	Test Tape CS-10 Tape Selector BIAS ...Fe-Cr, EQ...LH
100 Hz	0 ± 1 dB	0 ± 1 dB	0 ± 1 dB
1 kHz	0 dB	0 dB	0 dB
10 kHz	0 ± 1 dB	0 ± 1 dB	0 ± 1 dB

3. Rec./Pb. Distortion & Output

Input signal: 400 Hz OVU

Test Tape	Tape Selector	Rec/Pb Distortion	Rec/Pb Output
CS-20	CrO_2	Less than 2.5%	0 dBm ± 1 dB
TTA-119E	Fe-Cr	Less than 1.5%	0 dBm ± 1 dB
CS-10	BIAS...Fe-Cr EQ...LH	Less than 2.0%	0 dBm ± 1 dB

4. Rec./Pb. S/N

Input signal: 400 Hz OVU/no signal (RECORD LEVEL...MIN)

Dolby-NR	Test Tape	Tape Selector	Input Signal	S/N (dB)
OFF	CS-20	CrO_2	400 Hz	44
			No signal	
	TTA-119E	Fe-Cr	400 Hz	44
			No signal	
	CS-10	BIAS...Fe-Cr EQ...LH	400 Hz	42
			No signal	
ON	CS-20	CrO_2	400 Hz	48
			No signal	
	TTA-119E	Fe-Cr	400 Hz	48
			No signal	
	CS-10	BIAS...Fe-Cr EQ...LH	400 Hz	47
			No signal	

5. Erase Efficiency

Input signal: 400 Hz OVU + 10 dB
Use bandpass filter

Tape Selector	Test Tape	Specification
CrO_2	CS-20	More than 60 dB
Fe-Cr	TTA-119E	More than 60 dB
BIAS...Fe-Cr, EQ...LH	CS-10	More than 60 dB

6. Cross Talk & Separation

Input signal: 1 kHz OVU
Use bandpass filter

Measurement Item	Tape Selector	Test Tape	Specification
Cross Talk	CrO_2	TTA-119D	More than 65 dB
Separation	CrO_2	TTA-119D	More than 30 dB

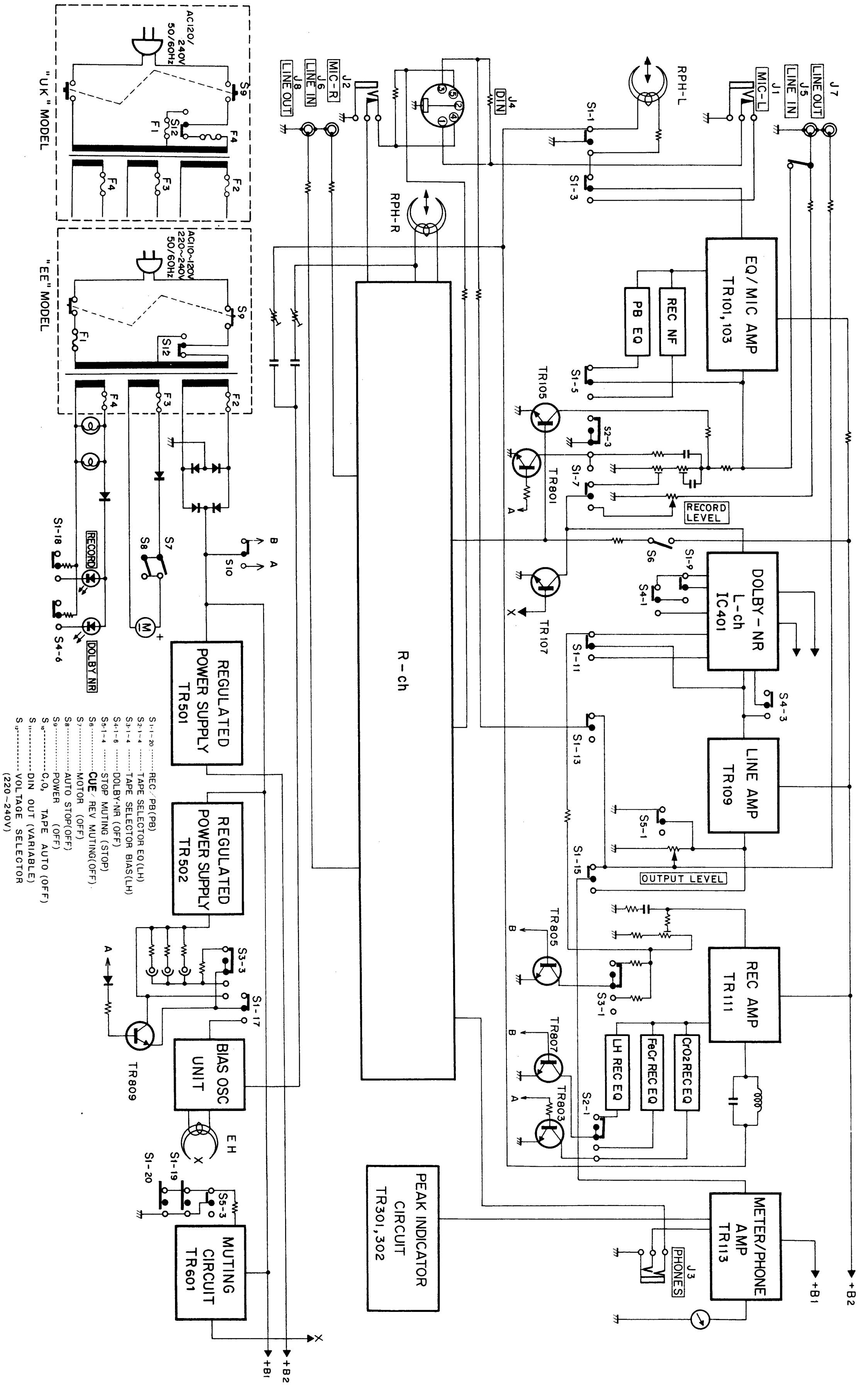
7. Playback Noise

Tape Selector	Test Tape	Specification	Remarks
CrO_2	TTA-119D	Less than 3 mV	Levels measured with set in PAUSE mode.
Fe-Cr	TTA-119E	Less than 3 mV	
LH	TTA-119A	Less than 4 mV	

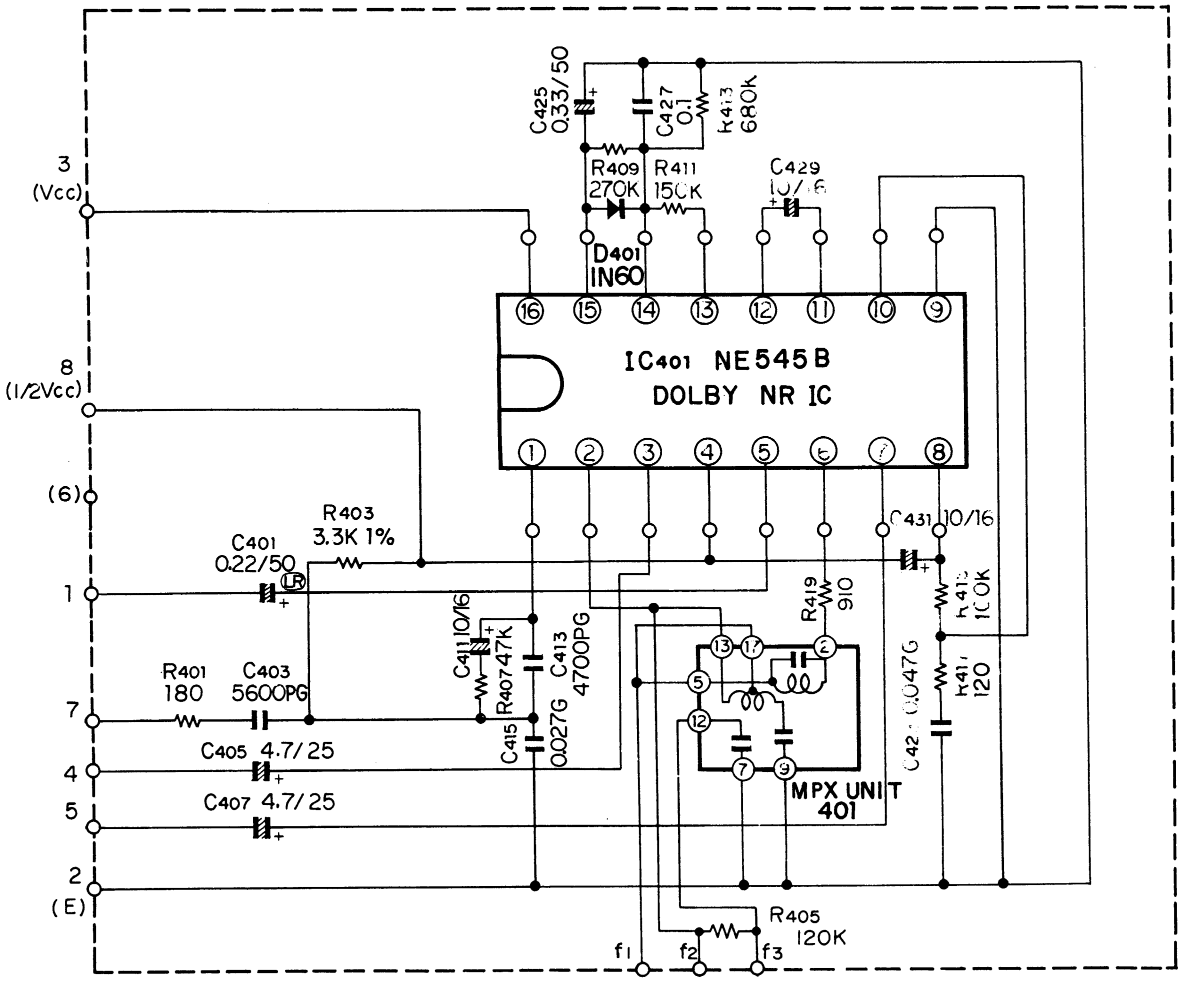
8. DOLBY-NR Effectiveness

Test Tape	Specification	
TTA-114	3~5 dB	Measure level difference between DOLBY-NR ON and OFF.

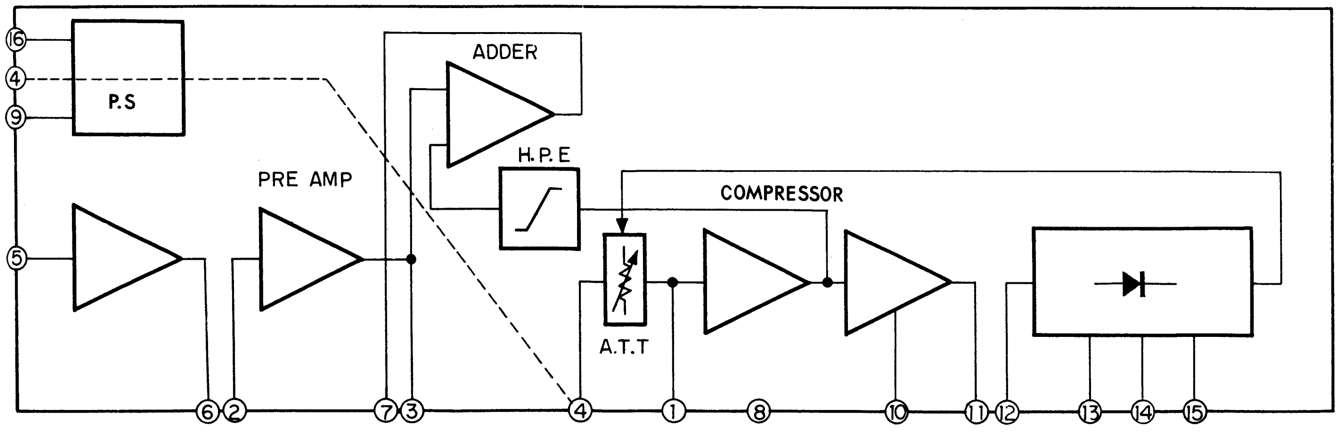
BLOCK DIAGRAM


"UK" MODEL
AC120/240V 50/60Hz
S9
S12
F1
F2
F3
F4
"EE" MODEL
AC110~120V 220~240V 50/60Hz
J2 MIC-R
J6 LINE IN
J8 LINE OUT
J4 DIN
RPH-L
RPH-R
J1 MIC-L
J5 LINE IN
J7 LINE OUT
S1-1
S1-3
EQ/MIC AMP TR101, 103
REC NF
PB EQ
S1-5
TR105
S2-3
TR801
S1-7
RECORD LEVEL
S6
S1-9
S4-1
DOLBY-NR L-ch IC401
TR107
S1-11
S4-3
S1-13
LINE AMP TR109
S5-1
S1-15
OUTPUT LEVEL
TR805
S3-1
REC AMP TR111
TR807
TR803
S2-1
LH REC EQ
FeCr REC EQ
CrO2 REC EQ
METER/PHONE AMP TR113
J3 PHONES
PEAK INDICATOR CIRCUIT TR301, 302
R-ch
S10
S7
S8
RECORD
DOLBY NR
S1-18
S4-6
REGULATED POWER SUPPLY TR501
REGULATED POWER SUPPLY TR502
S3-3
S1-17
TR809
BIAS OSC UNIT
EH
S1-19
S1-20
S5-3
MUTING CIRCUIT TR601
A
B
X
+B1
+B2
S1-1~20 ······REC/PB(PB)
S2-1~4 ·······TAPE SELECTOR EQ(LH)
S3-1~4 ·······TAPE SELECTOR BIAS(LH)
S4-1~6 ·······DOLBY-NR (OFF)
S5-1~4 ·······STOP MUTING (STOP)
S6 ···········CUE/REV MUTING(OFF)
S7 ···········MOTOR (OFF)
S8 ···········AUTO STOP(OFF)
S9 ···········POWER (OFF)
S10 ··········CrO2 TAPE AUTO (OFF)
S11 ··········DIN OUT (VARIABLE)
S12 ··········VOLTAGE SELECTOR (220~240V)

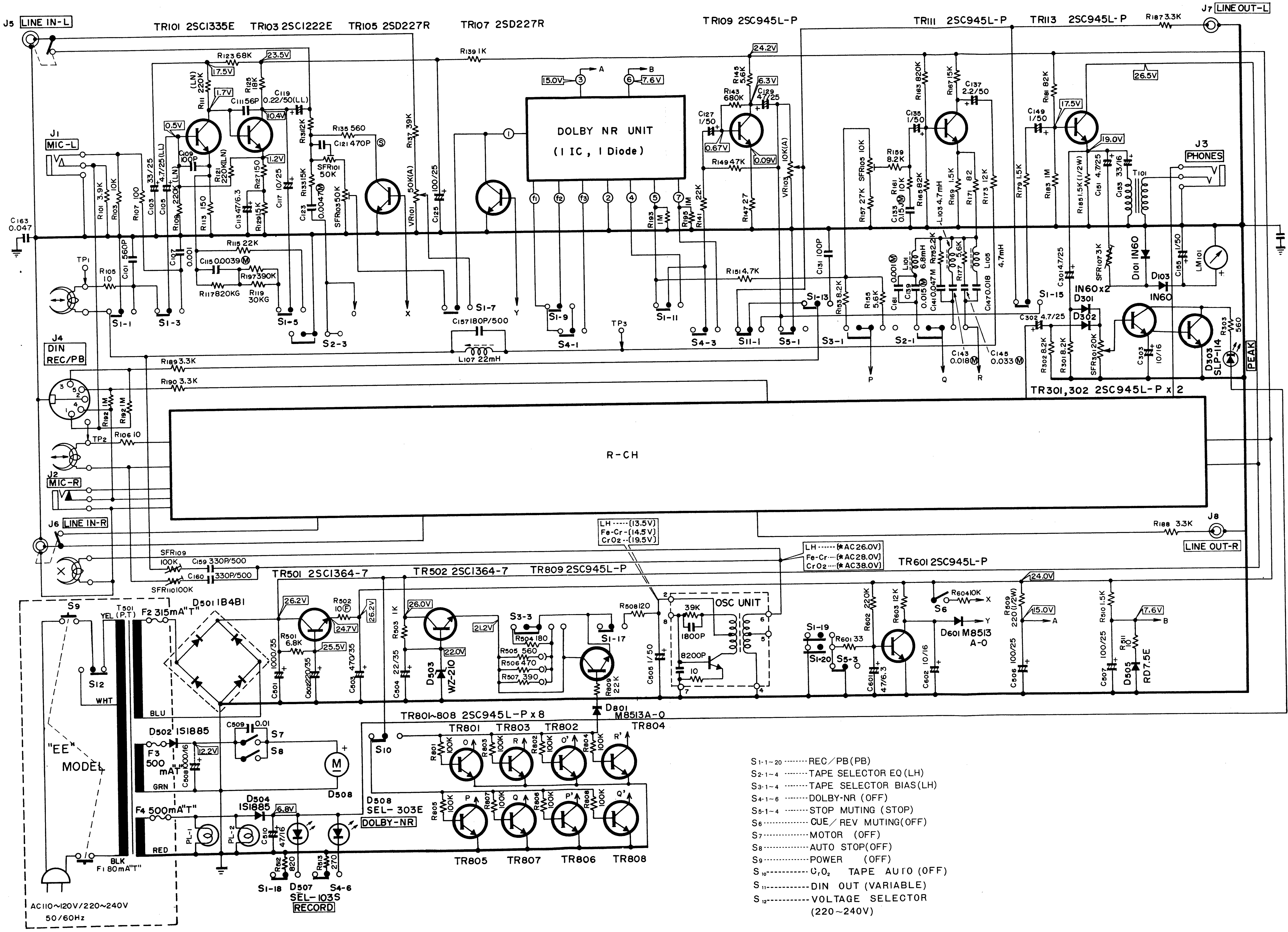
DOLBY-NR SCHEMATIC DIAGRAM


3
(Vcc)
8
(1/2Vcc)
(6)
1
7
4
5
2
(E)
C425
0.33/50
C427
0.1
R413
680K
R409
270K
R411
150K
C429
10/16
D401
IN60
⑯ ⑮ ⑭ ⑬ ⑫ ⑪ ⑩ ⑨
IC401 NE545B
DOLBY NR IC
① ② ③ ④ ⑤ ⑥ ⑦ ⑧
R403
3.3K 1%
C401
0.22/50
LR
C431 10/16
R415
100K
R419
910
C411 10/16
R407 47K
C413
4700PG
R401
180
C403
5600PG
C415
0.027G
C42
0.047G
R417
120
C405 4.7/25
C407 4.7/25
⑬ ⑰ ② ⑤ ⑫ ⑦ ⑨
MPX UNIT
401
R405
120K
f1
f2
f3

IC CIRCUIT DIAGRAM, NE545B

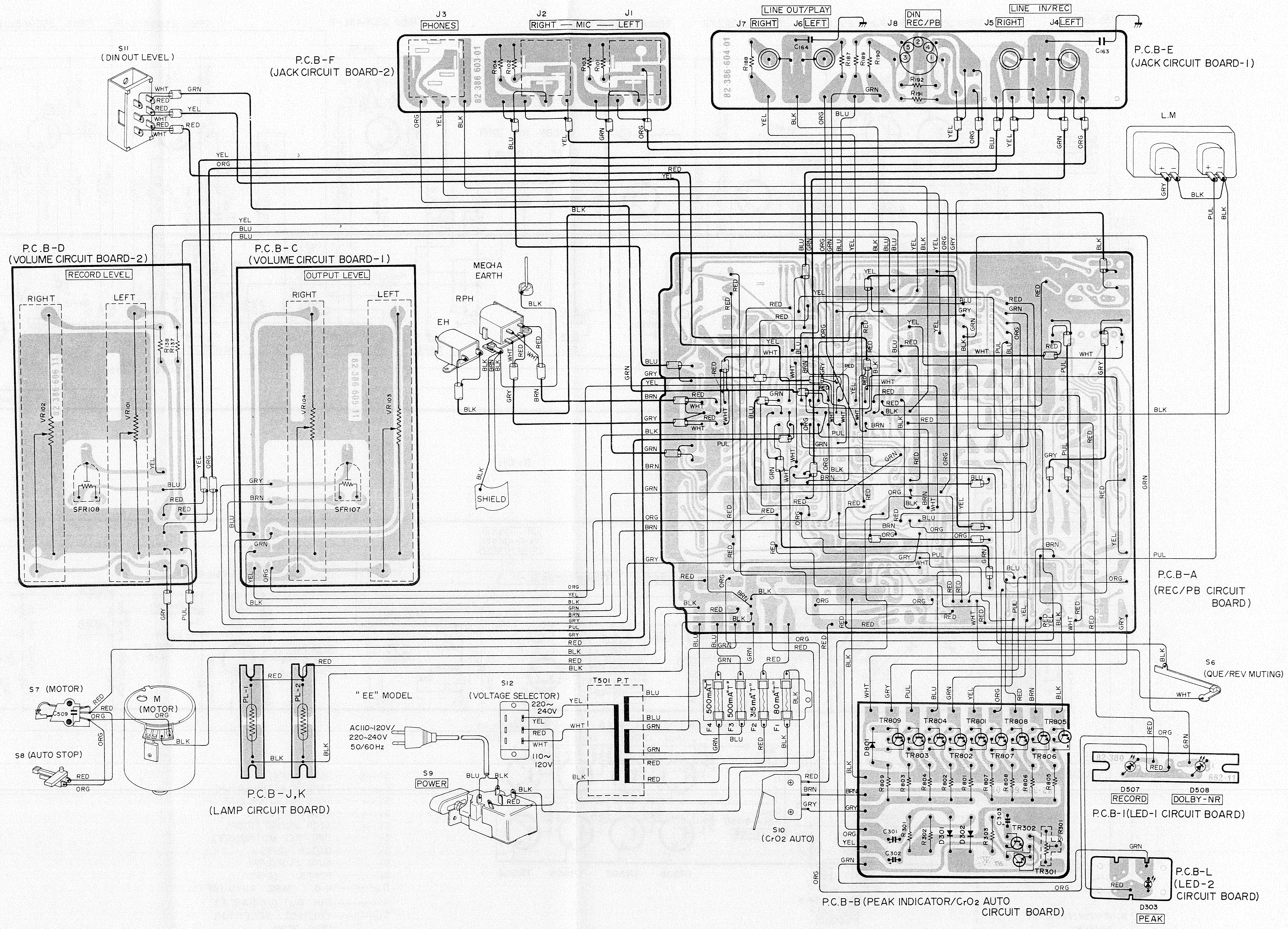

⑯
④
⑨
P.S
⑤
PRE AMP
ADDER
H.P.E
COMPRESSOR
A.T.T
⑥ ② ⑦ ③ ④ ① ⑧ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

SCHEMATIC DIAGRAM

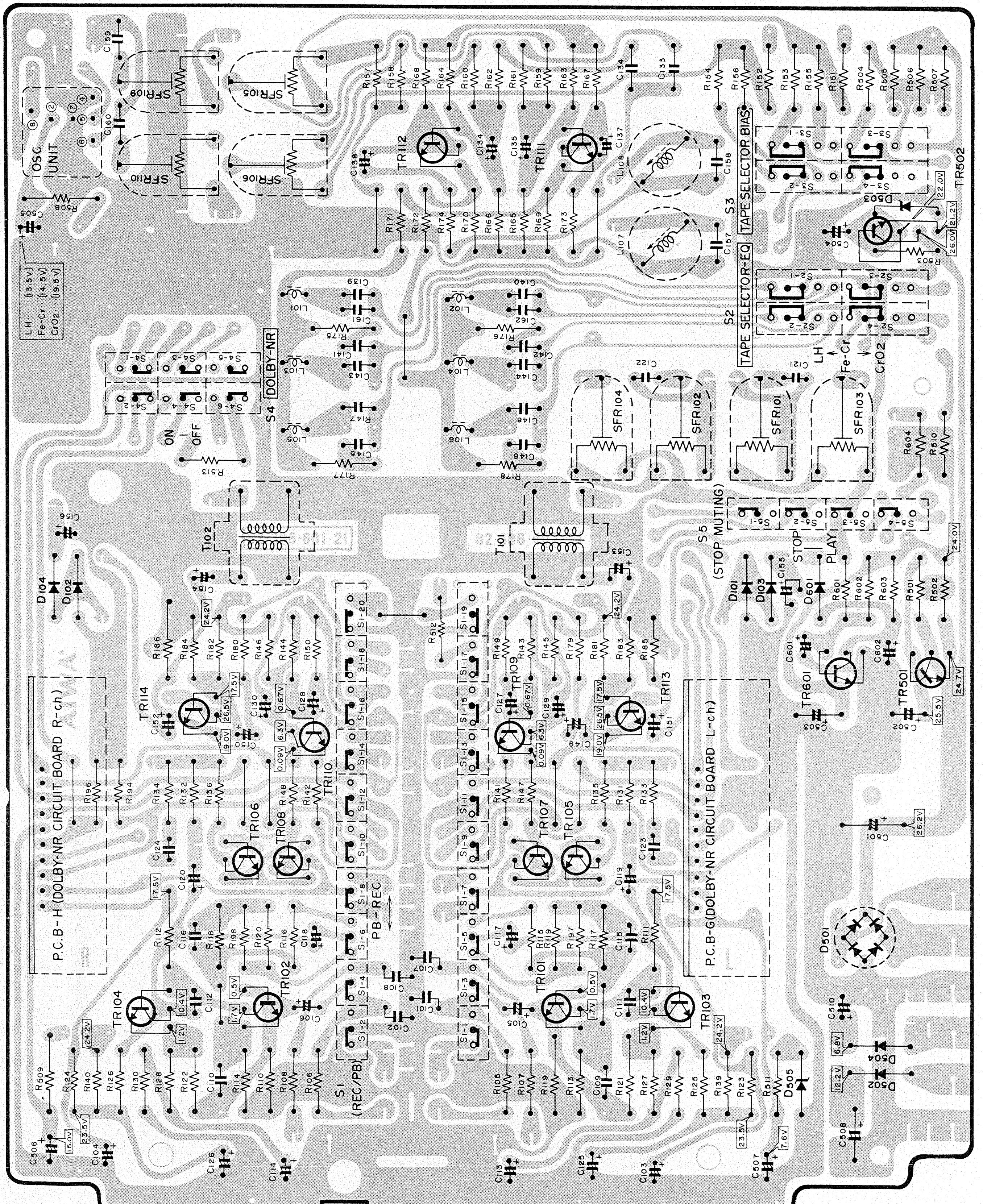

J5 LINE IN-L
J1 MIC-L
J4 DIN REC/PB
J2 MIC-R
J6 LINE IN-R
J7 LINE OUT-L
J8 LINE OUT-R
J3 PHONES
TR101 2SC1335E
TR103 2SC1222E
TR105 2SD227R
TR107 2SD227R
TR109 2SC945L-P
TR111 2SC945L-P
TR113 2SC945L-P
TR301,302 2SC945L-P x 2
DOLBY NR UNIT
(1 IC, 1 Diode)
R-CH
TR501 2SC1364-7
TR502 2SC1364-7
TR809 2SC945L-P
TR601 2SC945L-P
OSC UNIT
TR801~808 2SC945L-P x 8
D501 1B4B1
D502 1S1885
D503 WZ-210
D504 1S1885
D505 RD7.5E
D507 SEL-103S
RECORD
D508 SEL-303E
DOLBY-NR
D601 M8513 A-0
D801 M8513A-0
D301 D302 1N60x2
D101 1N60
D103 1N60
D303 SLP-114
PEAK
LM101
T101
T501 (P.T)
F1 80mA"T"
F2 315mA"T"
F3 500 mA"T"
F4 500mA"T"
"EE" MODEL
AC110~120V/220~240V
50/60Hz
LH-----(13.5V)
Fe-Cr-(14.5V)
CrO2--(19.5V)
LH------(*AC26.0V)
Fe-Cr---(*AC28.0V)
CrO2---(*AC38.0V)

S1-1~20 --------REC/PB(PB)
S2-1~4 --------TAPE SELECTOR EQ(LH)
S3-1~4 --------TAPE SELECTOR BIAS(LH)
S4-1~6 --------DOLBY-NR (OFF)
S5-1~4 --------STOP MUTING (STOP)
S6 ---------------CUE/REV MUTING(OFF)
S7 ---------------MOTOR (OFF)
S8 ---------------AUTO STOP(OFF)
S9 ---------------POWER (OFF)
S10 ------------C_rO_2 TAPE AUTO (OFF)
S11 ------------DIN OUT (VARIABLE)
S12 ------------VOLTAGE SELECTOR
(220~240V)

WIRING

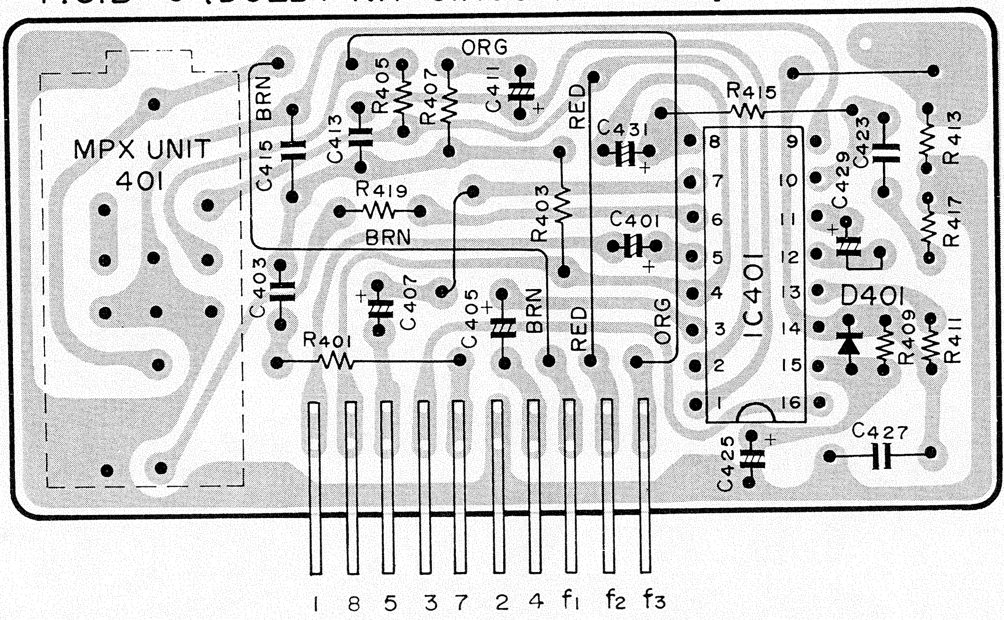

S11 (DIN OUT LEVEL)
P.C.B-F (JACK CIRCUIT BOARD-2)
J3 PHONES
J2 RIGHT — MIC — LEFT J1
LINE OUT/PLAY
J7 RIGHT J6 LEFT
J8 DIN REC/PB
LINE IN/REC
J5 RIGHT J4 LEFT
P.C.B-E (JACK CIRCUIT BOARD-1)
L.M
P.C.B-D (VOLUME CIRCUIT BOARD-2)
RECORD LEVEL
RIGHT
LEFT
VR102
VR101
SFR108
P.C.B-C (VOLUME CIRCUIT BOARD-1)
OUTPUT LEVEL
VR104
VR103
SFR107
MECHA EARTH
RPH
EH
SHIELD
P.C.B-A (REC/PB CIRCUIT BOARD)
S7 (MOTOR)
M (MOTOR)
C509
S8 (AUTO STOP)
PL-1
PL-2
P.C.B-J,K (LAMP CIRCUIT BOARD)
"EE" MODEL
S12 (VOLTAGE SELECTOR)
220~240V
110~120V
AC110-120V/ 220~240V 50/60Hz
S9 POWER
T501 P.T
F4 500mAT
F3 500mAT
F2 315mAT
F1 80mAT
S10 (CrO2 AUTO)
S6 (QUE/REV MUTING)
TR809 TR804 TR801 TR808 TR805
TR803 TR802 TR807 TR806
D801
TR302 TR301
D301 D302
C301 C302 C305
D507 RECORD
D508 DOLBY-NR
P.C.B-I (LED-1 CIRCUIT BOARD)
P.C.B-B (PEAK INDICATOR/CrO2 AUTO CIRCUIT BOARD)
P.C.B-L (LED-2 CIRCUIT BOARD)
D303 PEAK

REC/PB CIRCUIT BOARD


OSC UNIT
SFR109
SFR105
SFR110
SFR106
C159
C160
R508
C505
LH……(13.5V)
Fe-Cr…(14.5V)
CrO2…(19.5V)
R157
R158
R168
R164
R160
R162
R161
R159
R163
R167
C134
C133
R154
R156
R152
R153
R155
R151
R504
R505
R506
R507
C136
TR112
C134
C135
TR111
C137
L108
C158
TAPE SELECTOR BIAS
S3
S3-1
S3-2
S3-3
S3-4
TR502
D503
22.0V
21.2V
26.0V
C504
R503
R171
R172
R174
R170
R166
R165
R169
R173
L107
C157
TAPE SELECTOR-EQ
S2
S2-1
S2-2
S2-3
S2-4
LH
Fe-Cr
CrO2
C139
C140
L101
L102
C161
C162
R175
R176
C141
C142
L103
L104
C143
C144
C147
C148
R147
L105
L106
C145
C146
R177
R178
S4
DOLBY-NR
S4-1
S4-2
S4-3
S4-4
S4-5
S4-6
ON
OFF
R513
C122
C121
SFR104
SFR102
SFR101
SFR103
R604
R510
C156
T102
T101
C153
C154
S5
(STOP MUTING)
S5-1
S5-2
S5-3
S5-4
STOP
PLAY
24.0V
D104
D102
D101
D103
C155
D601
R601
R602
R603
R501
R502
R186
R184
R182
R180
R146
R144
R150
24.2V
R512
R149
R143
R145
R179
R181
R183
R185
24.2V
TR114
C152
17.5V
26.5V
19.0V
C130
C150
0.67V
6.3V
C128
0.09V
TR110
TR109
C127
C129
C149
0.67V
6.3V
0.09V
26.5V
17.5V
19.0V
TR113
C151
C601
TR601
C602
TR501
24.7V
C503
C502
25.5V
P.C.B-H (DOLBY-NR CIRCUIT BOARD R-ch)
R196
R194
R134
R132
R136
R148
R142
TR106
TR108
R141
R147
TR107
TR105
R135
R131
R133
P.C.B-G (DOLBY-NR CIRCUIT BOARD L-ch)
C501
26.2V
C124
C120
17.5V
C123
C119
17.5V
S1-1
S1-2
S1-3
S1-4
S1-5
S1-6
S1-7
S1-8
S1-9
S1-10
S1-11
S1-12
S1-13
S1-14
S1-15
S1-16
S1-17
S1-18
S1-19
S1-20
PB ↔ REC
R112
C116
R118
R198
R120
R116
C118
C117
R115
R119
R197
R117
C115
R111
D501
C107
C108
C101
C102
TR104
10.4V
C112
0.5V
TR102
1.7V
1.2V
C106
C105
TR101
1.7V
0.5V
C111
10.4V
1.2V
TR103
24.2V
C510
6.8V
D504
12.2V
D502
R509
R124
R140
R126
R130
R128
R122
C110
R114
R110
R108
R106
S1
(REC/PB)
R105
R107
R119
R113
C109
R121
R127
R129
R125
R139
R123
R511
D505
24.2V
C506
15.0V
23.5V
C104
C126
C114
C113
C125
C103
23.5V
C507
7.6V
C508

DOLRY-NR CIRCUIT BOARD

P.C.B-G (DOLBY-NR CIRCUIT BOARD)


MPX UNIT
401
BRN
ORG
C415
C413
R405
R407
C411
RED
R415
C431
C423
R413
R419
BRN
R403
C401
C429
R417
IC401
C403
C407
C405
BRN
RED
ORG
D401
R409
R411
R401
C425
C427
8
9
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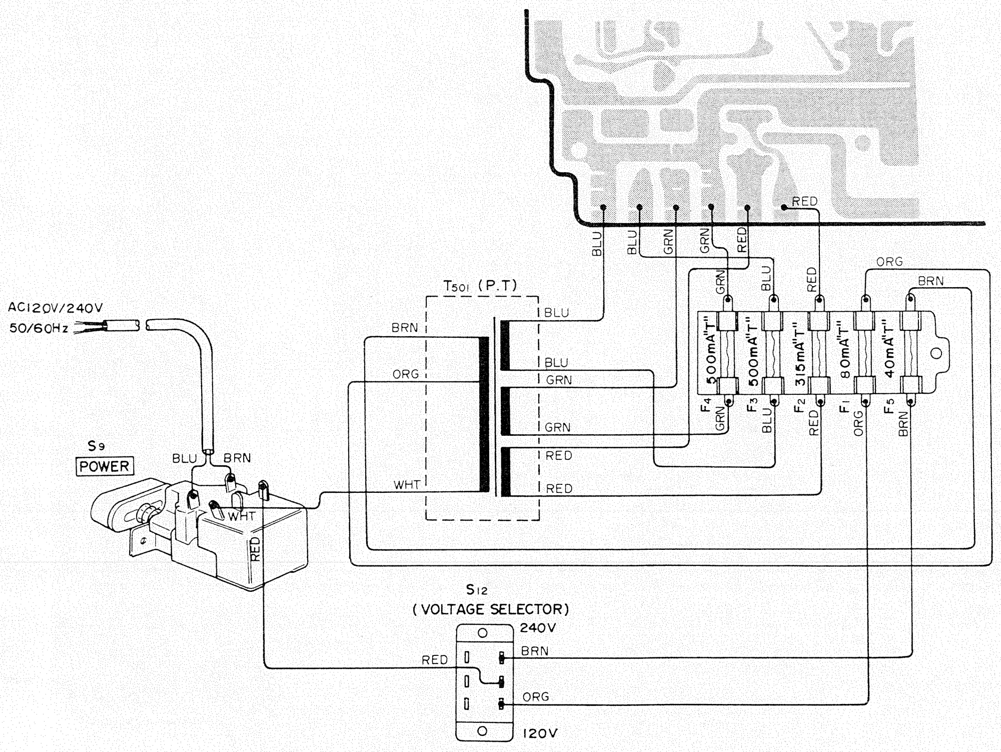
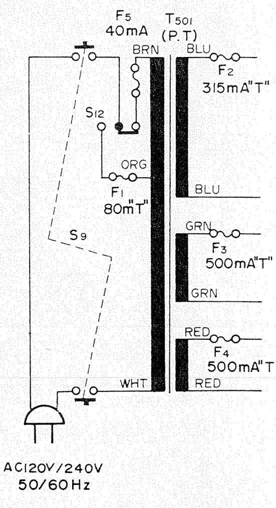
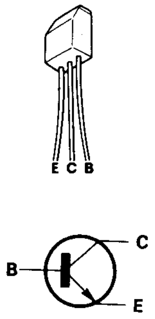
1
16
1 8 5 3 7 2 4 f1 f2 f3

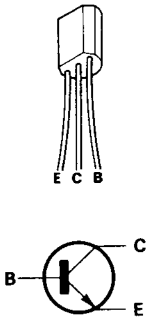
WIRING (POWER CIRCUIT BOARD)-UKMODEL


AC120V/240V
50/60Hz
S9
POWER
BLU
BRN
WHT
RED
T501 (P.T)
BRN
ORG
WHT
BLU
BLU
GRN
GRN
RED
RED
BLU
BLU
GRN
GRN
RED
RED
ORG
BRN
GRN
BLU
RED
500mA"T"
500mA"T"
315mA"T"
80mA"T"
40mA"T"
F4
F3
F2
F1
F5
GRN
BLU
RED
ORG
BRN
S12
(VOLTAGE SELECTOR)
240V
RED
BRN
ORG
120V

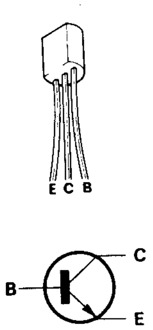

F5
40mA
T501
(P.T)
BRN
BLU
F2
315mA"T"
S12
ORG
F1
80m"T"
BLU
S9
GRN
F3
500mA"T"
GRN
RED
F4
500mA"T"
WHT
RED
AC120V/240V
50/60Hz



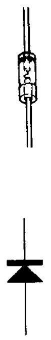
2SC1335



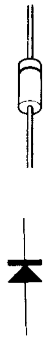
2SC1364



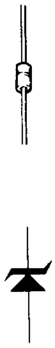
2SC1222
2SD227
2SC945



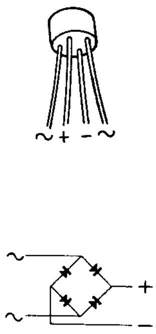
1N60



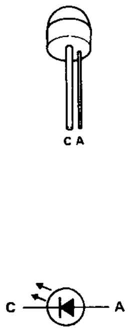
1S1885



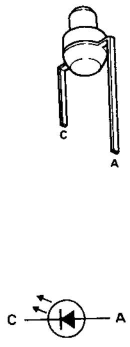
WZ210



1B4B1

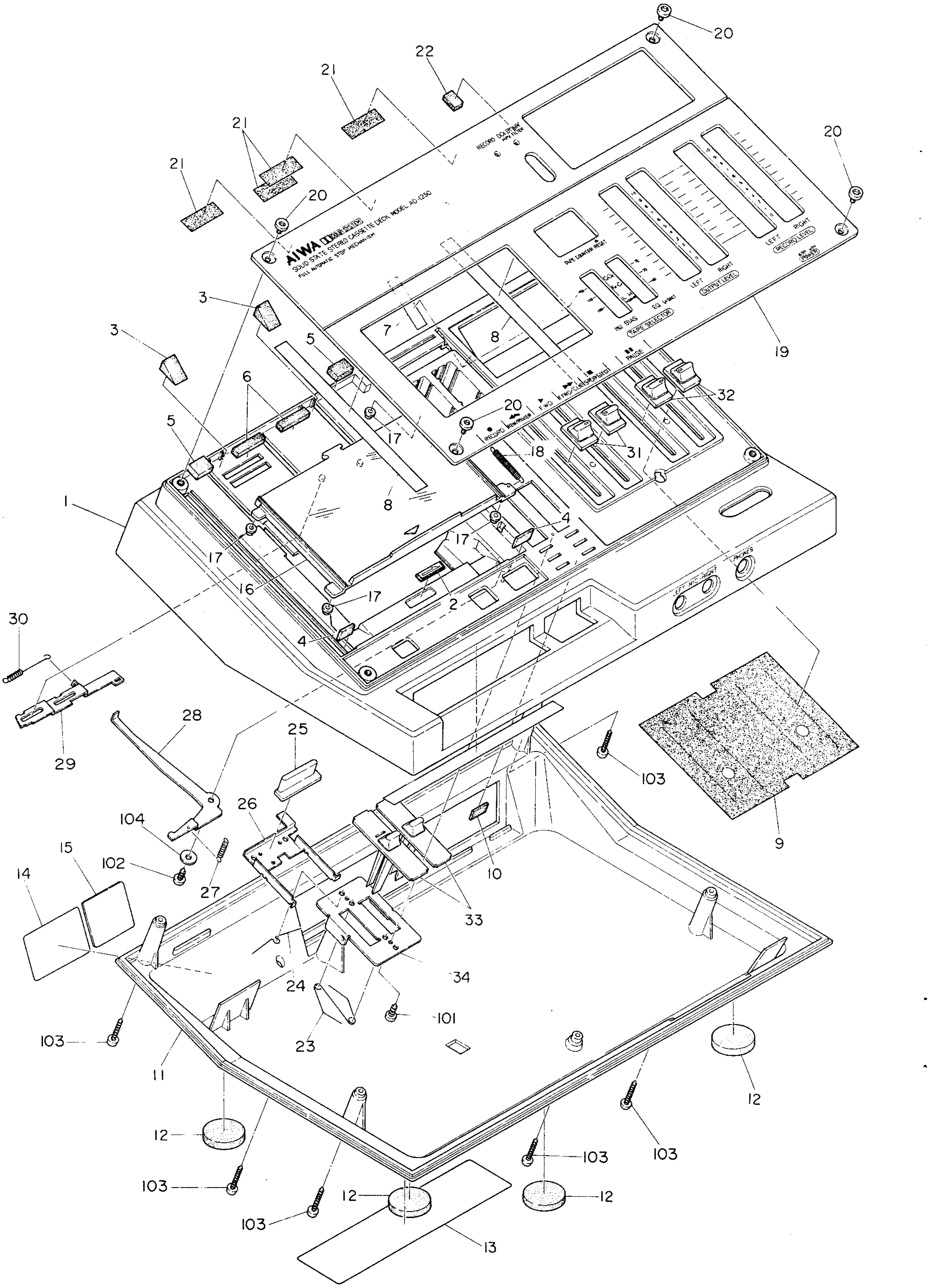


SLP114



SEL-103S
SEL-303E

EXPLODED VIEW–1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25
26
104
102
27
15
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101
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103
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103
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12
12
103
103
103
103
12
12
13
AIWA
SOLID STATE STEREO CASSETTE DECK MODEL AD-1250
FULL AUTOMATIC STOP MECHANISM
TAPE COUNTER RESET
BIAS
EQ
TAPE SELECTOR
PAUSE
RECORD
OUTPUT LEVEL
RECORD LEVEL
LEFT
RIGHT
PHONES
LEFT MIC RIGHT

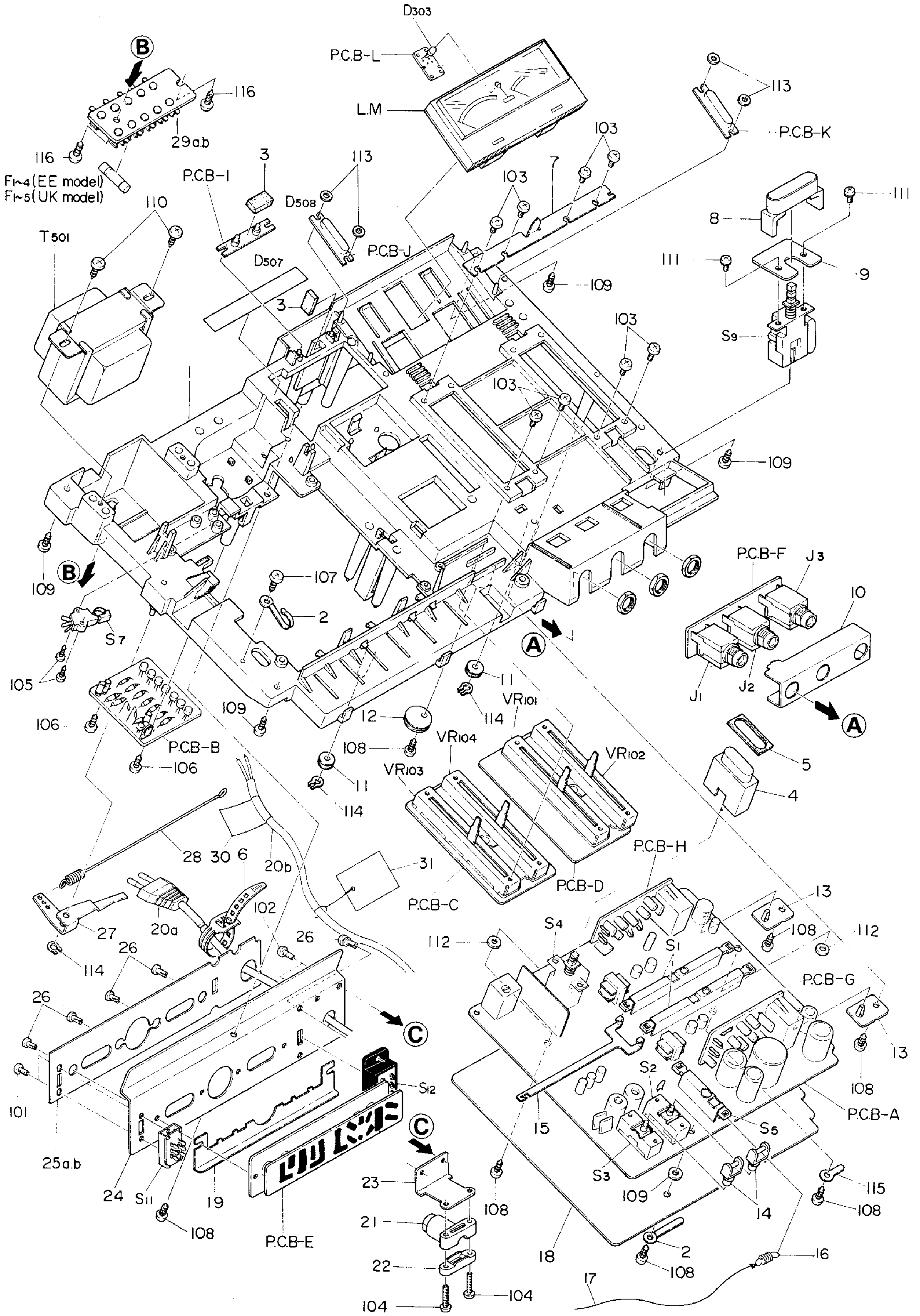
PARTS LIST

MECHANICAL PARTS

- * mark in this part list shows exclusive part (which is used) for only Model AD-1250

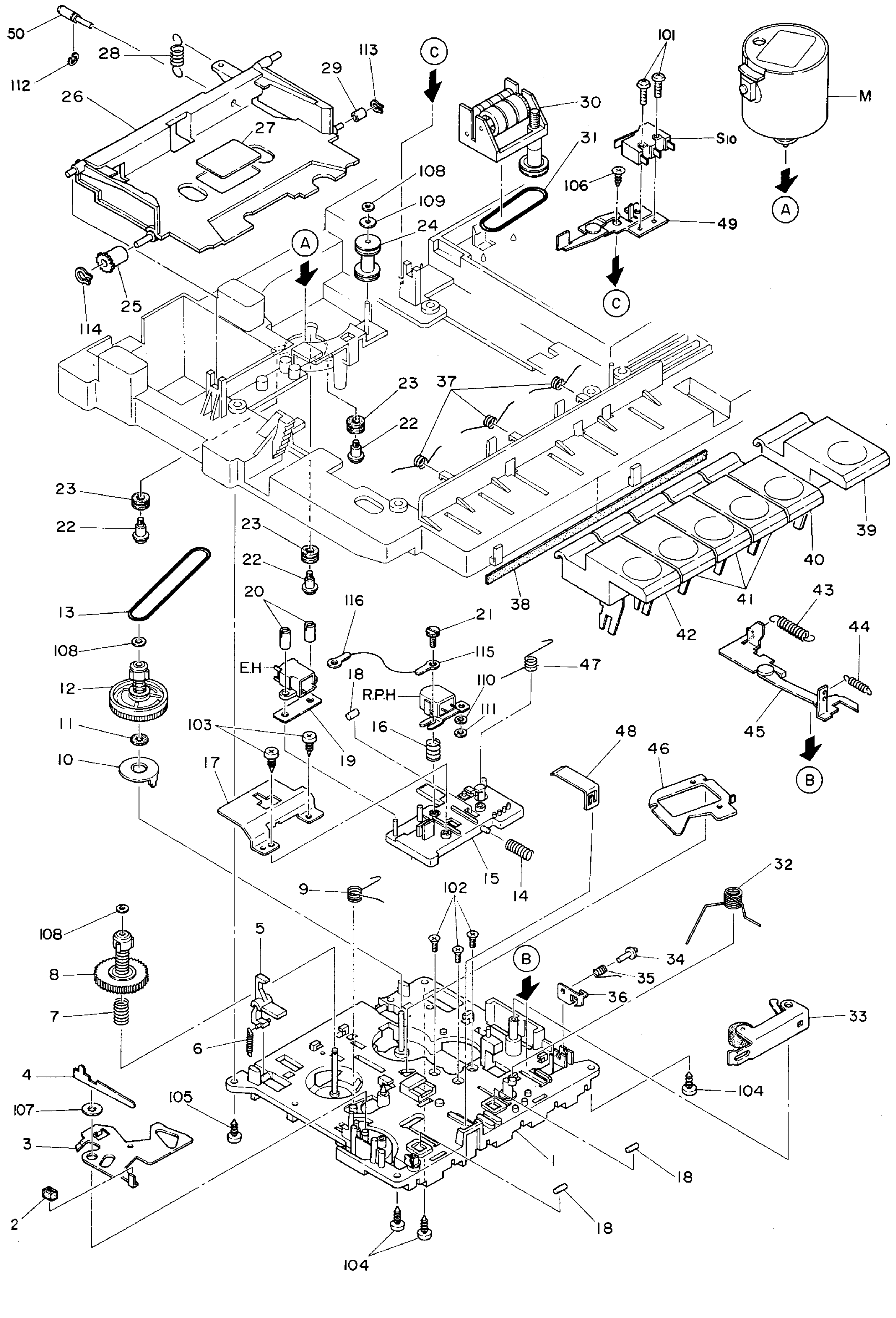
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1~15	80-003-860-41		Cabinet Assembly (Main case ass'y + Bottom cover ass'y)			
1~10	80-003-861-41		**Main case ass'y**			
1-1	82-386-001-01		Case proper	*	1	
1-2	82-386-009-01		Name plate, Arrow	*	1	
1-3	82-386-214-01		Stopper,Cassette lid	*	2	
1-4	82-386-254-01		G cushion	*	2	
1-5	82-386-270-01		M cushion	*	2	
1-6	82-386-269-01		M cushion	*	2	
1-7	82-386-266-01		Meter blind	*	2	
1-8	82-386-267-01		Tefron sheet	*	2	
1-9	82-386-227-01		Himeron cloth, Volume	*	1	
1-10	82-386-253-01		G cushion	*	2	
11~15	80-003-862-41		**Bottom cover ass'y**			
1-11	82-386-002-01		Back cover	*	1	
1-12	82-386-016-01		Leg, Back cover	*	4	
1-13	82-386-054-01		Label H, Caution	*	1	
1-14	82-386-046-01		Label C, Caution	*	1	
1-15	82-386-027-01		Name plate, Spec.	*	1	
1-16	82-384-004-01		Cassette lid		1	
1-17	82-386-226-01		Pulley, Cassette lid	*	4	
1-18	82-385-285-01		Spring, Lid arm		1	
1-19	82-386-034-01		Panel, Top	*	1	
1-20	82-386-017-01		Screw, Top panel	*	4	
1-21	82-386-264-01		Himeron cloth	*	4	
1-22	82-386-272-01		G cushion	*	1	
1-23	82-386-250-01		Spring A, Button holder	*	1	
1-24	82-386-261-01		Spring B, Button holder	*	1	
1-25	82-386-013-01		Reset button	*	1	
1-26	82-386-241-01		Metal fitting, Reset button	*	1	
1-27	82-386-262-01		Spring, Lock plate	*	1	
1-28	82-386-204-01		Lock plate B	*	1	
1-29	82-386-203-01		Lock plate C	*	1	
1-30	82-386-244-01		Spring, Lock plate	*	1	
1-31	82-386-010-01		Knob A, Volume	*	2	
1-32	82-386-011-01		Knob B, Volume	*	2	
1-33	82-386-012-01		Knob, Selector	*	2	
1-34	82-386-205-01		Holder, Selector button	*	1	

EXPLODED VIEW—2


D303
P.C.B-L
L.M
B
116
29a.b
116
Fı~4(EE model)
Fı~5(UK model)
3
P.C.B-I
113
D508
P.C.B-J
113
P.C.B-K
103
7
103
8
111
111
9
110
T501
D507
3
109
103
S9
1
103
109
109
B
107
2
P.C.B-F
J3
10
A
S7
105
11
J1
J2
A
109
12
114
VR101
106
P.C.B-B
106
108
VR104
VR102
VR103
11
114
5
4
28
30
6
20b
31
P.C.B-H
P.C.B-C
P.C.B-D
27
20a
102
26
112
S4
S1
13
108
112
114
26
P.C.B-G
26
C
15
S2
13
108
101
S12
P.C.B-A
S5
25a.b
C
24
S11
19
23
S3
108
109
115
14
108
108
P.C.B-E
21
18
2
108
16
22
17
104
104

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
2-1	82-386-202-01		Mechanism chassis	*	1
2-2	87-038-039-01		Binder, Lead wire		2
2-3	82-386-265-01		Cushion, Circuit board	*	2
2-4	82-386-015-01		Button, Dolby	*	1
2-5	82-386-242-01		Cushion, Button	*	1
2-6	87-058-023-01		Binder, AC cord		1
2-7	82-386-216-01		Plate, Earth	*	1
2-8	82-386-014-01		Button, AC switch	*	1
2-9	82-386-215-01		Holder, AC switch	*	1
2-10	82-386-628-01		Shield plate	*	1
2-11	87-071-013-01		Pulley A		2
2-12	82-386-240-01		Pulley, Adjusting	*	1
2-13	87-064-056-01		Hinge, Circuit board		2
2-14	82-386-206-01		Arm, Selector switch	*	2
2-15	82-386-207-01		Metal fitting, REC switch	*	1
2-16	82-386-221-01		Spring, REC switch	*	1
2-17	87-096-084-01		String, Play muting		1
2-18	82-386-620-01		Shield paper	*	1
2-19	82-386-629-01		Shield plate	*	1
2-20a	87-034-835-01		AC cord (EE model only)		1
2-20b	87-034-848-01		AC cord (UK model only)		1
2-21	87-085-094-01		Holder, AC cord A		1
2-22	87-085-095-01		Holder, AC cord B		1
2-23	82-386-219-01		Metal fitting, AC cord holder	*	1
2-24	82-386-018-01		Panel, Rear jack	*	1
2-25a	82-386-039-01		Plate, Jack (EE model only)	*	1
2-25b	82-386-040-01		Plate, Jack (UK model only)	*	1
2-26	87-085-102-01		Nylon rivet		6
2-27	82-386-208-01		Metal fitting, REC relay	*	1
2-28	82-386-222-01		Spring, REC relay metal	*	1
2-29a	82-379-678-01		Holder, Fuse (EE model only)	AD-1800	1
2-29b	82-386-634-01		Holder, Fuse (UK model only)	*	1
2-30	87-056-008-01		Label, AC cord (UK model only)		1
2-31	87-056-016-01		Tag, Voltage selector (UK model only)		1

EXPLODED VIEW–3


50
112
28
26
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113
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C
30
31
101
S10
M
108
109
24
A
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49
A
C
25
114
23
37
22
23
22
23
22
39
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38
41
42
13
108
12
11
10
20
E.H
116
21
115
18
R.P.H
110
111
47
43
44
45
B
103
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102
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108
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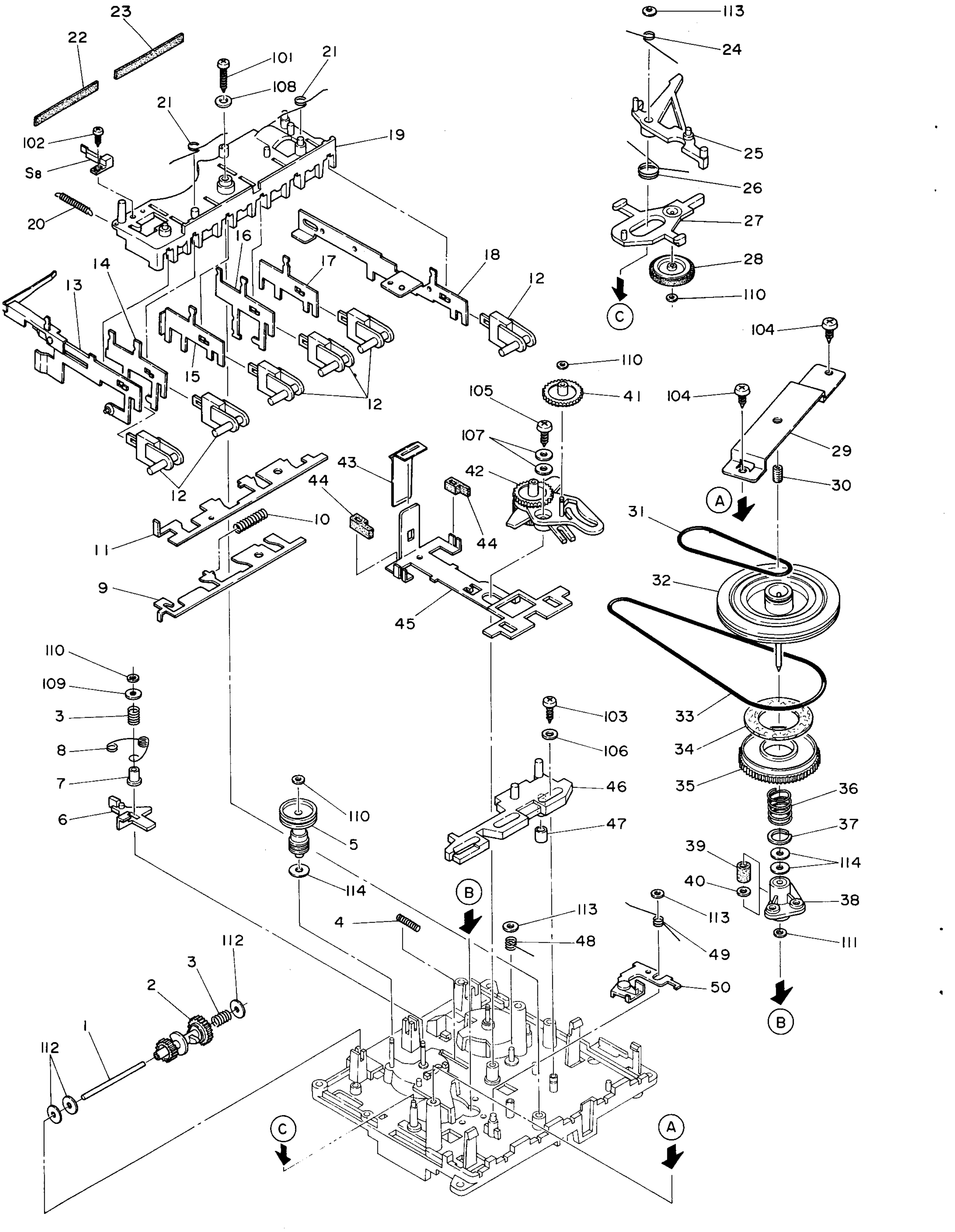
104

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
3-1	82-439-202-01		Chassis	TPR-300	1
3-2	82-439-302-01		Pad, Switch	TPR-300	1
3-3	82-439-235-01		REC lock lever	TPR-300	1
3-4	82-385-620-01		Leaf switch	AD-6300	1
3-5	82-385-281-01		Record-blocking lever	AD-6300	1
3-6	82-386-243-01		Spring, Record-blocking lever	*	1
3-7	82-439-380-01		Spring, Back tension	TPR-300	1
3-8	82-439-216-01		Supply reel platform ass'y	TPR-300	1
3-9	82-439-289-01		Spring, REC lock lever	TPR-300	1
3-10	82-439-358-01		Slip disk	TPR-300	1
3-11	82-439-367-01		Felt, 7-5-12	TPR-300	1
3-12	82-439-208-01		Take-up reel platform ass'y	TPR-300	1
3-13	82-283-378-01		Belt, Relay	TP-770	1
3-14	82-439-281-01		Spring, Moving chassis	TPR-300	1
3-15	82-385-303-01		Moving chassis	AD-6300	1
3-16	82-385-332-01		Spring B, Head adjusting	AD-6300	1
3-17	82-386-633-01		Shield plate, Head	*	1
3-18	82-439-297-11		Roller 3ϕ	TPR-300	3
3-19	82-385-323-01		Spacer, Erase head	AD-6300	1
3-20	82-385-318-01		Nut, 2ϕ	AD-6300	2
3-21	82-439-373-01		Shaft, Head adjusting	TPR-300	1
3-22	87-081-483-01		Screw, Motor		3
3-23	82-439-319-01		Rubber cushion B	TPR-300	3
3-24	82-422-230-01		Pulley, Relay		1
3-25	82-386-258-01		Gear, Cassette-up plate	*	1
3-26	82-386-209-01		Cassette-up plate	*	1
3-27	82-386-033-01		Label, Tape indication	*	1
3-28	82-386-233-01		Spring, Cassette-up plate	*	1
3-29	82-386-228-01		Collar, Cassette-up plate	*	1
3-30	87-040-085-01		Counter		1
3-31	82-446-204-01		Belt, Counter		1
3-32	82-439-277-01		Spring, Play lever	AD-6300	1
3-33	82-439-364-01		Pinch lever ass'y	TPR-300	1
3-34	82-439-268-01		Shaft, Lock plate	TPR-300	1
3-35	82-439-275-01		Spring, Lock plate	TPR-300	1
3-36	82-385-278-01		Lock plate	AD-6300	1
3-37	82-386-257-01		Spring, Button	*	3
3-38	82-386-008-01		Cushion, Button	*	1
3-39	82-386-006-01		Key, PAUSE	*	1
3-40	82-386-005-01		Key, STOP	*	1
3-41	82-386-007-01		Key, FWD	*	3
3-42	82-386-234-01		Key, REC	*	1
3-43	82-370-419-01		Spring, Up plate lock lever		1
3-44	82-386-229-01		Spring, Brake arm	*	1
3-45	82-476-232-01		Up plate lock lever ass'y		1
3-46	82-385-374-11		REV lever B	AD-6300	1
3-47	82-439-206-01		Spring B, Pinch lever	TPR-300	1
3-48	82-439-277-01		Plate spring, Moving chassis	TPR-300	1
3-49	82-386-263-01		CrO_2 switch holder ass'y	*	1
3-50	82-474-260-01		Shaft, CrO_2 switch		1

EXPLODED VIEW-4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Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
4-1	82-439-300-01		Shaft, Worm wheel	TPR-300	1	
4-2	82-439-408-01		Worm wheel ass'y	AD-6300	1	
4-3	82-439-369-01		Spring, Slip	TPR-300	2	
4-4	82-439-371-01		Spring, Brake	TPR-300	1	
4-5	82-385-309-01		Worm gear B ass'y	AD-6300	1	
4-6	82-439-357-01		Slider	TPR-300	1	
4-7	82-439-368-01		Bushing, Slider	TPR-300	1	
4-8	82-439-288-01		Spring, Slider	TPR-300	1	
4-9	82-439-375-01		Slide plate B	TPR-300	1	
4-10	82-439-284-01		Spring, Slide plate	TPR-300	1	
4-11	82-439-233-01		Slide plate A	TPR-300	1	
4-12	82-386-225-01		Terminal, Button	*	6	
4-13	82-386-260-01		Pause lever ass'y	*	1	
4-14	82-439-231-01		Stop lever	TPR-300	1	
4-15	82-439-232-01		Lever, FF	TPR-300	1	
4-16	82-439-345-01		Lever, PLAY	TPR-300	1	
4-17	82-439-230-01		Lever, REW	TPR-300	1	
4-18	82-439-228-01		Lever, REC	TPR-300	1	
4-19	82-439-432-01		Back plate	TPR-300	1	
4-20	82-439-267-01		Spring, Pause lever	TPR-300	1	
4-21	82-283-300-01		Spring, Push-button	TP-770	2	
4-22	82-386-256-01		G cushion B	*	1	
4-23	82-386-255-01		G cushion A	*	1	
4-24	82-439-287-01		Spring, Auto-kick lever	TPR-300	1	
4-25	82-439-255-01		Auto-kick lever	TPR-300	1	
4-26	82-439-286-01		Spring, Play idler lever	TPR-300	1	
4-27	82-439-259-01		Play idler lever	TPR-300	1	
4-28	82-285-255-01		Play idler ass'y		1	
4-29	82-474-219-01		Holder F		1	
4-30	82-385-311-01		Screw for thrust	AD-6300	1	
4-31	82-385-314-01		Rubber belt, Worm	AD-6300	1	
4-32	82-385-307-01		Flywheel ass'y	AD-6300	1	
4-33	82-283-272-01		Belt, Main		1	
4-34	82-439-389-01		Felt, 24ϕ	TPR-300	1	
4-35	82-439-355-01		Gear, Slip	TPR-300	1	
4-36	82-439-246-01		Spring, Flywheel	TPR-300	1	
4-37	82-439-354-01		Washer, 18ϕ	TPR-300	1	
4-38	82-385-379-01		Shaft bearing ass'y	AD-6300	1	
4-39	82-439-292-01		Drive rubber	TPR-300	1	
4-40	82-439-385-01		Oil stopper	TPR-300	1	
4-41	82-439-356-01		FR gear B	TPR-300	1	
4-42	82-439-218-01		FR lever ass'y	TPR-300	1	
4-43	82-385-252-01		Plate spring, Brake plate	AD-6300	1	
4-44	82-439-426-01		Brake shoe A	TPR-300	2	
4-45	82-439-269-01		Brake plate	AD-6300	1	
4-46	82-439-225-01		FR slide plate	TPR-300	1	
4-47	82-439-226-01		Collar, FR slide plate	TPR-300	1	
4-48	82-439-290-01		Spring, FR slide plate	TPR-300	1	
4-49	82-439-280-01		Spring, Release lever	TPR-300	1	
4-50	82-439-360-01		Release lever ass'y	TPR-300	1	

Ref. No.	Part No.	Description	Q'ty
1-101	87-341-071-01	UT_1 + 2.6-4	2
1-102	87-341-074-01	UT_1 + 2.6-8	1

Ref. No.	Part No.	Description	Q'ty
1-103	87-341-101-01	UT_1 + 3-18	6
1-104	87-410-317-01	W3-10-0.8	1

Ref. No.	Part No.	Description	Q'ty
2-101	87-295-071-01	U + 2.6-4 (Black)	2
2-102	87-295-092-01	U + 3-4 (Black)	2
2-103	87-251-093-01	U + 3-5	8
2-104	87-253-099-01	U + 3-15	2
2-105	87-341-037-01	UT_1 + 2-10	2
2-106	87-341-073-01	UT_1 + 2.6-6	2
2-107	87-341-094-01	UT_1 + 3-6	1
2-108	87-341-096-01	UT_1 + 3-10	6

Ref. No.	Part No.	Description	Q'ty
2-109	87-341-097-01	UT_1 + 3-12	4
2-110	87-341-171-01	UT_1 + 4-10	2
2-111	87-480-093-01	VS + 3-5	2
2-112	87-081-486-01	FW3.2-8-2	3
2-113	87-081-498-01	PW2.1-5-0.13	4
2-114	87-442-003-01	STP-3	3
2-115	87-450-414-01	LB-4	1
2-116	87-341-095-01	UT_1 + 3-8	2

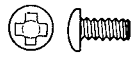
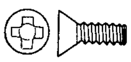
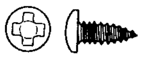
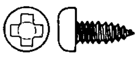
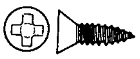
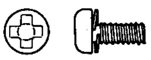
Ref. No.	Part No.	Description	Q'ty
3-101	87-253-036-01	U + 2-8	2
3-102	87-329-074-01	Q + 2.6-8 (Black)	3
3-103	87-351-072-01	VT_1 + 2.6-5	2
3-104	87-341-096-01	UT_1 + 3-10	3
3-105	87-341-099-01	UT_1 + 3-15	1
3-106	87-321-073-01	QT_1 + 2.6-8	1
3-107	87-081-015-01	FW 3-8-0.5	1
3-108	87-081-489-01	PW1-7-3.5-0.25	3

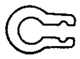
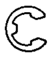
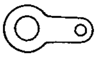
Ref. No.	Part No.	Description	Q'ty
3-109	87-081-492-01	PW2.1-8-0.13	1
3-110	87-081-036-01	TW2-5-0.2	1
3-111	86-604-019-01	2.5φw	1
3-112	87-441-609-01	STE-3	1
3-113	87-442-002-01	STP-2	1
3-114	87-442-004-01	STP-4	1
3-115	87-450-411-01	LB-1	1
3-116	87-450-412-01	LB-2	1

Ref. No.	Part No.	Description	Q'ty
4-101	87-351-102-01	VT_1 + 3-20	1
4-102	87-341-034-01	UT_1 + 2-5	1
4-103	87-351-035-01	UT_1 + 2-6	1
4-104	87-341-074-01	UT_1 + 2.6-8	2
4-105	87-341-075-01	UT_1 + 2.6-10	1
4-106	87-410-305-01	W2-6-0.4	1
4-107	87-410-311-01	W2.6-7.5-0.5	2

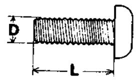
Ref. No.	Part No.	Description	Q'ty
4-108	87-410-325-01	W4-10-0.8	1
4-109	87-081-030-01	FW2-6-0.5	1
4-110	87-081-409-01	PW1.7-3.5-0.25	4
4-111	87-081-498-01	PW2.1-5-0.13	1
4-112	87-081-492-01	PW2.1-8-0.13	3
4-113	87-081-484-01	PW3-6-0.25	3
4-114	87-081-319-01	TW2.3-8-0.2	3

HARDWARE NOMENCLATURE

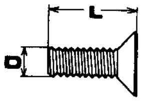
U:	Binding head screw	
Q:	Flat countersunk head screw	
UT1:	Binding head tapping screw	
VT1:	Pan head tapping screw	
QT1:	Flat countersunk head tapping screw	
VS:	Pan head screw with spring washer	

W:	Washer	
FW:	Fiber washer	
PW:	Poly-slider washer	
TW:	Tefron washer	
STP:	Powerful stop ring	
STE:	E ring	
LB:	Lug terminal plate	

Example:



V + 3 – 6
- Length in mm
- Diameter in mm
- Type of Slot
- Type of Head



Q + 3 – 6
- Length in mm
- Diameter in mm
- Type of Slot
- Type of Head

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1	82-386-858-01		Packing, Printed indiv.	*	1
2	82-386-862-01		Cushion L, Printed indiv.	*	1
3	82-386-863-01		Cushion R, Printed indiv.	*	1
4	87-051-145-01		Poly-vinyl sack (for case)		1
5	87-056-500-01		Curl stopper		2
6	87-056-549-01		Poly-vinyl sack (for AC cord)		1
7	87-051-171-01		Poly-vinyl sack (for instruction)		1
8a	82-386-906-01		Instruction booklet (EE model only)	*	1
8b	82-386-907-01		Instruction booklet (UK model only)	*	1
9	86-925-002-01		Connection cord, CW-115k		1
10	87-058-019-01		Head cleaning pole ass'y		1
11	80-291-645-01		Tape cassette, DMC-130A		1
12	87-056-009-01		Distributors list		1
13	87-056-571-01		Label, Cassette lid		1
14	82-386-857-01		Protection sheet A	*	1
15	82-386-866-01		Cushion A, Auxiliary	*	1
16	82-386-861-01		Cushion B, Auxiliary	*	1
17	82-386-065-01		Dust cover ass'y	*	1
18	82-386-867-01		Pad, Dust cover	*	1

ELECTRICAL PARTS

Symbol No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
≪ REC/PB CIRCUIT BOARD SECTION ≫					
PCB-A	82-386-602-11		REC/PB circuit board	*	1
< REC/PB SECTION >					
TR101,102	39-313-355-01		Transistor, 2SC1335 (E)		2
TR103,104	89-312-222-01		Transistor, 2SC1222 (E)		2
TR105,106 107,108	89-402-275-01		Transistor, 2SD227 (R)		4
TR109,110 111,112 113,114	89-309-456-01		Transistor, 2SC945 (L-P)		6
D101,102,103 104	88-051-060-01		Diode, IN60		4
L101,102	82-371-648-01		Coil, 6.8mH		2
L103,104,105 106	87-005-093-01		Coil, 4.7mH		4
L107,108	82-371-644-01		Trap coil, 22mH		2
T101,102	82-370-610-01		Matching transformer		2
S1	87-031-390-01		Slide switch (REC/PB)		2
S2,3	82-386-630-01		Lever switch (TAPE SELECTOR EQ-BIAS)	*	2
S4	82-386-618-01		Push switch (DOLBY-NR)	*	1
OSC UNIT	82-385-609-11		Bias OSC unit	AD-6300	1
SFR101,102 103,104	87-021-432-01		Semi-fixed resistor, 50KΩ-B		4
SFR105,106	87-021-445-01		Semi-fixed resistor, 10KΩ-B		2
SFR109,110	87-021-446-01		Semi-fixed resistor, 100KΩ-B		2
			< Resistors >		
R105,106	88-130-100-01		10Ω 1/4W ±5%		2
R147,148	88-130-270-01		27Ω 1/4W ±5%		2
R171,172	88-130-820-01		82Ω 1/4W ±5%		2
R107,108	88-130-101-01		100Ω 1/4W ±5%		2
R113,114,127 128	88-130-151-01		150Ω 1/4W ±5%		4
R135,136	88-130-561-01		560Ω 1/4W ±5%		2
R139,140	88-130-102-01		1KΩ 1/4W ±5%		2
R129,130,169 170,179,180	88-130-152-01		1.5KΩ 1/4W ±5%		6
R175,176	88-130-222-01		2.2KΩ 1/4W ±5%		2
R151,152	88-130-472-01		4.7KΩ 1/4W ±5%		2
R145,146,155 156,177,178	88-130-562-01		5.6KΩ 1/4W ±5%		6
R153,154,159 160	88-130-828-01		8.2KΩ 1/4W ±5%		4
R161,162	88-130-103-01		10KΩ 1/4W ±5%		2
R131,132,173 174	88-130-123-01		12KΩ 1/4W ±5%		4
R133,134,167 168	88-130-153-01		15KΩ 1/4W ±5%		4
R125,126	88-130-183-01		18KΩ 1/4W ±5%		2
R115,116,141 142	88-130-223-01		22KΩ 1/4W ±5%		4
R157,158	88-130-273-01		27KΩ 1/4W ±5%		2
R149,150	88-130-473-01		47KΩ 1/4W ±5%		2
R123,124	88-130-683-01		68KΩ 1/4W ±5%		2
R165,166,181 182	88-130-823-01		82KΩ 1/4W ±5%		4
R143,144	88-130-684-01		680KΩ 1/4W ±5%		2
R163,164	88-130-824-01		820KΩ 1/4W ±5%		2
R183,184,193 194,195,196	88-130-105-01		1MΩ 1/4W ±5%		6
R109,110,111 112,121,122	88-183-224-01		220KΩ 1/4W ±5% ELR LN		6
R197,198	88-181-394-01		390KΩ 1/4W ±5% ELR		2
R185,186	88-141-152-01		1.5KΩ 1/2W ±5%		2
R119,120	87-002-006-01		30KΩ 1/4W ±5%		2
R117,118	88-181-824-01		820KΩ 1/4W ±5% ELR		2

Symbol No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
			<Capacitors>		
C127,128,135 136,155,156	88-337-100-01		1µF 50V Electrolytic		6
C137,138	88-337-200-01		2.2µF 50V Electrolytic		2
C129,130,151 152	88-336-500-01		4.7µF 25 V Electrolytic		4
C117,118	88-336-110-01		10µF 25V Electrolytic		2
C103,104	88-336-310-01		33µF 25V Electrolytic		2
C125,126	88-336-120-01		100µF 25V Electrolytic		2
C153,154	88-335-310-01		33µF 16V Electrolytic		2
C113,114,601	88-332-510-01		47µF 6.3V Electrolytic		3
C119,120	87-015-328-01		0.22µF 50V Electrolytic LR		2
C105,106	87-015-246-01		4.7µF 25V Electrolytic LR		2
C161,162	88-707-610-01		0.001µF Mylar		2
C115,116	88-707-710-01		0.0039µF Mylar		2
C123,124	88-707-720-01		0.0047µF Mylar		2
C139,140	88-707-820-01		0.015µF Mylar		2
C143,144,147 148	88-707-880-01		0.018µF Mylar		4
C145,146	88-707-840-01		0.033µF Mylar		2
C141,142	88-707-850-01		0.047µF Mylar		2
C133,134	88-717-920-01		0.15µF Mylar		2
C121,122	88-507-550-01		470pF Styrol		2
C111,112	88-212-310-01		56pF Ceramic		2
C109,110,131 132	88-212-410-01		100pF Ceramic		4
C107,108	88-214-610-01		0.001µF Ceramic		2
C101,102	88-218-560-01		560pF Ceramic		2
C157,158	88-238-460-01		180pF 500V Ceramic		2
C159,160	88-238-520-01		330pF 500V Ceramic		2
<POWER SECTION>					
TR501,502	89-313-647-01		Transistor, 2SC1364 (7)		2
D501	87-027-163-01		Diode, 1B4B1		1
D502,504	87-027-083-01		Diode, 1S1885		2
D503	82-385-622-01		Zener diode, WZ210	AD-6300	2
D505	82-371-647-01		Zener diode, RD7.5E		1
			<Resistors>		
R511	88-130-100-01		10Ω 1/4W ±5%		1
R504	88-130-181-01		180Ω 1/4W ±5%		1
R513	88-130-271-01		270Ω 1/4W ± 5%		1
R507	88-130-391-01		390Ω 1/4W ±5%		1
R506	88-130-471-01		470Ω 1/4W ±5%		1
R505	88-130-561-01		560Ω 1/4W ±5%		1
R512	88-130-821-01		860Ω 1/4W ±5%		1
R510	88-130-152-01		1.5KΩ 1/4W ±5%		1
R501	88-130-682-01		6.8KΩ 1/4W ±5%		1
R514	88-181-272-01		2.7KΩ 1/4W ±5% ELR		1
R508	88-140-121-01		120Ω 1/2W ±5%		1
R509	88-141-221-01		220Ω 1/2W ±5%		1
R502	87-029-015-01		10Ω Fuse resistor		1
			<Capacitors>		
C505	88-337-100-01		1µF 50V Electrolytic		1
C504	88-344-210-01		22µF 35V Electrolytic		1
C502	88-344-220-01		220µF 35V Electrolytic		1
C503	88-344-520-01		470µF 35V Electrolytic		1
C510	88-335-510-01		47µF 16V Electrolytic		1
C508	88-335-130-01		1000µF 16V Electrolytic		1
C501	87-015-326-01		1000µF 35V Electrolytic		1
<MUTING SECTION>					
TR601	89-309-456-01		Transistor, 2SC945 (L-P)		1
D602	87-026-066-01		Diode, M8513A(O)		1
S5	82-370-619-01		Slide switch (STOP MUTING)		1

Symbol No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
			<Resistors>		
R601	88-130-330-01		33Ω 1/4W ±5%		1
R604	88-130-103-01		10KΩ 1/4W ±5%		1
R603	88-130-123-01		12KΩ 1/4W ±5%		1
R602	88-130-224-01		220KΩ 1/4W ±5%		1
			<Capacitor>		
C602	88-335-110-01		10μF 16V Electrolytic		1
≪PEAK INDICATOR / CrO$_2$ AUTO CIRCUIT BOARD SECTION≫					
PCB-B	82-386-609-01		PEAK INDICATOR/CrO$_2$ AUTO circuit board	*	1
<PEAK INDICATOR SECTION>					
TR301,302	89-309-456-01		Transistor, 2SC945L (P)		2
D301,302	88-051-060-01		Diode, 1N60		2
SFR301	87-021-375-01		Semi-fixed resistor, 20kΩ-B		1
			< Resistors >		
R303	88-130-561-01		560Ω 1/4W ±5%		1
R301,302	88-130-822-01		8.2kΩ 1/4W ±5%		2
			< Capacitors >		
C301,302	88-336-500-01		4.7μF 25V Electrolytic		2
C303	88-335-110-01		10μF 16V Electrolytic		1
< CrO$_2$ AUTO SECTION >					
TR801~809	89-309-456-01		Transistor, 2SC945L (P)		9
D801	87-026-066-01		Diode, M8513A (O)		1
			< Resistors >		
R809	88-130-223-01		22kΩ 1/4W ±5%		1
R801~80	88-130-104-01		100kΩ 1/4W ±5%		8
≪VOLUME CIRCUIT BOARD-1 SECTION≫					
PCB-C	82-386-605-01		VOLUME circuit board-1	*	1
VR103,104	82-386-616-01		Slide volume, 10KΩ-A (OUTPUT LEVEL)	*	1
SFR107	87-021-444-01		Semi-fixed resistor, 3KΩ-B		1
≪VOLUME CIRCUIT BOARD-2 SECTION≫					
PCB-D	82-386-606-01		VOLUME circuit board-2	*	1
VR101,102	82-386-617-01		Slide volume, 50KΩ-A (RECORD LEVEL)	*	1
SFR108	87-021-444-01		Semi-fixed resistor, 3KΩ-B		1
			<Resistors>		
R137,138	88-130-393-01		33KΩ 1/4W ±5%		2
≪JACK CIRCUIT BOARD-1 SECTION≫					
PCB-E	82-386-604-01		JACK circuit board-1	*	1
J4,5,6,7,8	82-386-621-01		Jack Ass'y (LINE IN, LINE OUT, DIN)	*	1
			<Resistors>		
R187,188,189 190	88-130-332-01		3.3KΩ 1/4W ±5%		4
R191,192	88-130-105-01		1MΩ 1/4W ±5%		2
≪JACK CIRCUIT BOARD-2 SECTION≫					
PCB-F	82-386-603-01		JACK circuit board-2	*	1
J1,2	87-032-749-01		Jack 6.3φ (MIC L, R)		2
J3	87-032-748-01		Jack 6.3φ (PHONES)		1
			<Resistors>		
R101,102	88-130-392-01		3.9KΩ 1/4W ±5%		2
R103,104	88-130-103-01		10KΩ 1/4W ±5%		2
≪DOLBY-NR CIRCUIT BOARD SECTION≫					
PCB-G.H	82-385-650-11		DOLBY-NR circuit board	AD-6300	2
IC401,402	87-027-151-01		IC, NB545B		2
D401,402	88-051-060-01		Diode, IN60		2
MPX UNIT	82-385-611-01		Filter unit	AD-6300	2
	87-032-640-01		Connector, 10P		2

Symbol No.	Parts No.	Part No. Changed to	Description	Common Model	Q'ty
			< Resistors >		
R417,418	88-181-121-01		120Ω 1/4W ±5% ELR		2
R409,410	88-181-911-01		910Ω 1/4W ±5% ELR		2
R407,408	88-181-473-01		47KΩ 1/4W ±5% ELR		2
R405,406	88-181-124-01		120KΩ 1/4W ±5% ELR		2
R411,412	88-181-154-01		150KΩ 1/4W ±5% ELR		2
R409,410	88-181-274-01		270KΩ 1/4W ±5% ELR		2
R413,414	88-181-684-01		680KΩ 1/4W ±5% ELR		2
R401,402	88-131-181-01		180Ω 1/4W ±5%		2
R415,416	88-131-104-01		100KΩ 1/4W ±5%		2
R403,404	82-371-652-01		3.3KΩ 1/4W ±1%		2
			< Capacitors >		
C401,402	87-015-282-01		0.22μF 50V Electrolytic LR		2
C425,426	88-337-394-01		0.33μF 50V Electrolytic		2
C405,406,407 408	88-336-500-01		4.7μF 25V Electrolytic		4
C411,412,429 430,431,432	88-335-110-01		10μF 16V Electrolytic		6
C413,414	82-371-643-01		4700pF PP		2
C403,404	82-371-642-01		5600pF PP		2
C415,416	82-371-641-01		0.027μF PP		2
C423,424	88-707-850-01		0.047μF Mylar		2
C427,428	88-717-910-01		0.1μF Mylar		2
≪ LED-1 CIRCUIT BOARD SECTION ≫					
PCB-I	82-380-662-01		LED-1 circuit board	AD-6500	1
D507	87-026-112-01		Light emitting diode, SEL103S LED (RECORD)		1
D508	87-026-113-01		Light emitting diode, SEL103E GRN (DOLBY-NR)		1
≪ LAMP CIRCUIT BOARD SECTION ≫					
PCB-J.K	82-386-608-11		LAMP circuit board	*	2
PL1,2	82-380-626-01		Pilot lamp (METER)	AD-6500	2
≪ LED-2 CIRCUIT BOARD SECTION ≫					
PCB-L	82-385-644-01		LED-2 circuit board	AD-6500	1
D303	87-026-083-01		Light emitting diode, SLP-114 (PEAK)		1
≪ MISCELLANEOUS ≫					
T501	82-386-613-01		Power transformer (EE model only)	*	1
T501	82-386-614-01		Power transformer (UK model only)	*	1
RPH	87-046-130-01		REC/PB head		1
EH	87-046-131-01		Erase head		1
LM	82-385-643-01		Level meter	AD-6300	1
M	82-386-631-01		Motor		1
S7	87-031-363-01		Micro switch (MOTOR)		1
S8	87-031-361-01		Leaf switch (AUTO STOP)		1
S9	87-031-349-01		Push switch (POWER)		1
S10	87-031-377-01		Micro switch (CrO_2 AUTO)		1
S11	82-375-623-01		Slide switch (DIN OUT)	AD-1300	1
S12	87-031-364-01		Slide switch (VOLTAGE SELECTOR)		1
F1	87-035-123-01		Fuse, 80mA "T"		1
	87-057-816-01		Fuse label, 80mA "T"		1
F2	87-350-107-01		Fuse, 315mA "T"		1
	87-057-795-01		Fuse label, 315mA "T"		1
F3,4	87-035-075-01		Fuse, 500mA "T"		2
	87-057-806-01		Fuse label, 500mA "T"		2
F5	87-035-151-01		Fuse, 40mA "T" (UK model only)		1
	87-057-831-01		Fuse label, 40mA "T" (UK model only)		1
	82-379-678-01		Fuse holder, 4P (EE model only)	AD-1800	1
	82-386-634-01		Fuse holder, 5P (UK model only)	*	1
			< Capacitors >		
C163,164	88-215-850-01		0.047μF Ceramic		2
C509	88-215-810-01		0.01μF Ceramic		1